

JPRS Report

Proliferation Issues

PROLIFERATION ISSUES

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18 December 1992

[This report contains foreign media information on issues related to worldwide proliferation and transfer activities in nuclear, chemical, and biological weapons, including delivery systems and the transfer of weapons-relevant technologies.]

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SOUTH AFRICA

Air Force Denies Monitoring Japanese Plutonium Ship

MB2611134792 Johannesburg SAPA in English 1228 GMT 26 Nov 92

[Text] Pretoria Nov 26 SAPA—The South African Air Force [SAAF] denied on Thursday [26 November] that it had deployed an aircraft to monitor the controversial Japanese freighter, Akatsuki Maru, which is carrying a deadly cargo of plutonium from a French port to Japan.

"The SAAF will only react if requested to do so by the Department of Environmental Affairs or any other organisation responsible for South Africa's territorial waters," an SAAF headquarters statement said.

On Wednesday, Environmental Affairs Minister Louis Pienaar said the Japanese Government had informed South Africa that the freighter with its 1.7 [metric] ton plutonium oxide cargo would at no stage pass closer than 110 nautical miles from the South African coast line.

In terms of international maritime law, any vessel may sail outside a country's 12 nautical mile territorial zone without that country's consent, Mr. Pienaar said.

Somchem's Rocket Launcher, Test Described

93AF0161A Johannesburg THE STAR in English 16 Oct 92 p 11

[Article by Anita Allen]

[Text] Some people in this country celebrated the start of Space Week with a big roar on Monday and in the process South Africans were given their first glimpse of the capabilities of the local space industry.

In 52 seconds of controlled combustion, Somchem, the systems house that manufactures launch rockets, successfully managed to burn up 10 tons of fuel at temperatures reaching 3,000 deg. C to release a thrust of approximately 500 km, capable of boosting a load of 500 kg on its way to orbit the Earth.

The launch system is made up of three solid-fuel rocket motors, linked to a computer which will jettison each motor as it burns out.

Monday's test involved a rocket motor which holds 10 tons of solid-fuel in a state-of-the-art composite material tube about 5 m long by 1,5 m in diameter.

Rocketeers said the propellant's ingredients—an oxidiser, metal fuel and a polymer—were well-known, but the secret lay in the mixing and formulation. They said the fuel's texture and colour was not unlike dough, which could be manipulated to give the required burning properties.

Instead of launching into space, the rocket motor is tested anchored horizontally on the test bench, its

exhaust pointing towards a high mound of rocks about 150 m away designed to deflect exhaust gases skywards.

On firing, the solid fuel is ignited down its core, and then burns outwards, until there is none left in the tube. The burn starts comparatively slowly and then escalates in seconds to a 30 m-long yellow-white flame, which is accompanied by a sonic roar.

The resulting white exhaust gases hit the mound of rocks and mushroom into the air.

Rocketeers are quite adamant that this is a controlled burning, and say that at no time is there any danger to the surrounding environment.

The test pad itself is a concrete slab within an area of about 2 ha [hectare] which has been cleared of vegetation, revealing white sand and rocks.

Two environmentalists, Dr. Allan Heydorn, a specialist consultant for the S.A. Nature Foundation and representative of the World Wildlife Fund, and Dr. Charles Boucher, of the University of Stellenbosch department of botany, both said that monitoring carried out after previous tests had not revealed any adverse effects on flora and fauna in the area.

The test site is located within a 500 ha valley in the mountains behind Pringle Bay in the Cape, known as Klein Hangklip Mountain.

It is currently the subject of a Supreme Court action brought by the Rooi Els Local Council against the Overberg Regional Council and Somchem.

Residents are concerned that the testing activities could possibly lead to contamination of the water catchment area of the Buffles River Dam and cause environmental damage.

Heydorn, who did the initial impact study when Somchem acquired the site for test purposes, said that where man's activities were concerned there was always an impact on the environment.

The Somchem project did have an environmental impact, but this was restricted to the 2 ha of land around the test pad which had to be sacrificed, as well as a few square metres of land around the control-centre building.

He pointed out that the area had not been a pristine environment, in that the previous owner had grown proteas, which did not occur naturally in the area. Today, this land was slowly being rehabilitated to indigenous flora.

The fact that the area was not open to the public was also a plus, in Heydorn's view. Boucher agreed, and pointed out that tagging of plants and subsequent monitoring, as well as water analysis, had established that the tests were not adversely affecting the environment.

AEC Technology Adapted for Industry

93AF0161B Johannesburg THE STAR in English 26 Oct 92 p 25

[First paragraph is THE STAR introduction]

[Text] The new S.A. [South Africa] has presented lots of fresh challenges for the Atomic Energy Corporation [AEC], among them the need to become more business oriented.

S.A.'s Atomic Energy Corporation (AEC) is rapidly shaking off its once sinister image and is today a business-oriented body whose function is to produce quality industrial solutions and adapt technology, products and services to create cost-effective packages for industry.

"Essentially the idea is to use our available technology, whether nuclear or non-nuclear; adapt and apply it in everyday industrial environments, often in a seemingly mundane situation," says Roland von Gogh, AEC manager corporate marketing.

In keeping with this overall philosophy, two businessoriented groups have been created within the AEC, made up in turn of several business units.

The terminology is no accident—the corporation began to apply commercial business principles to its operations three years ago and although there is no hint of privatisation at this stage, the emphasis is on applying strictly commercial principles to assess the performance of the various business units.

He says the Corporate Business Development programme is where the marketing and development of embryonic business units takes place.

This programme comprises six business units currently. They are:

· Turbo Systems Technology.

Specialised Plating Technology.

 Biogam—a facility that supplies irradiated foodstuffs on a large scale.

 Membrasep—suppliers of membrane technology in gas and liquid separation.

 Lumitec, whose core product is low-intensity, extremely long-life lighting requiring no electrical supply.

Nuclear Fuels Programme, involved in the conversion of "yellow cake" (uranium/diucranate) to what is known as uranium hexafloride. This is the feedstock for the renowned and, until recently, highly secret S.A. uranium enrichment process.

The enriched uranium is processed further into pastilles of uranium dioxide, which are contained within fuel pins, in turn fabricated into fuel assemblies at Pelindaba for use in nuclear power stations.

The biggest client for the assemblies at present is Koeberg Power Station. Various products related to the nuclear fuel cycle are currently being exported.

The Nuclear Fuels Programme has a nuclear waste-disposal capability developed on the basis of extensive research and

well in advance of actual waste generation. It is said to be among the best, if not the best, in the world and is attracting international attention.

Von Gogh says the AEC is exceptionally environmentally aware and has developed outstanding technology for dealing with nuclear waste and environmental control problems in general.

A second grouping of business units, known as Peltek, incorporates the more mature business units—those that have proved themselves commercially and to which units from the Corporate Business Development Programme are "promoted" once they have achieved similar status.

This group has seven business units including HTP (High Technology Products) which was originally an offshoot of AEC activities, sold to the IDC [Industrial Development Corporation] and other shareholders four years ago for strategic reasons, it was decided to reincorporate it into AEC within the Peltek group with HTP managing director Dr. Karel Voigt as executive general manager.

The basic business units of the Peltek group now comprise:

- Isotope Production Centre—medical and industrial isotope applications.
- Fluorochemical production—products such as hydrogen fluoride, sodium, silica fluoride and numerous other bulk fluorides.
- · Flosep, which produces dust-separation equipment.
- Noise Analysis, which provides systems to monitor machinery for preventative maintenance purposes.
- Nuclear Techniques Industrial Services instrumentation development and services for process control measurement for a host of industries.
- Earth and Environmental Technology, which has its base in geology, geohydrology, meteorology and geophysics.
- Aerosol and Air Quality, which supplies technology related to aerosol physics to sectors such as the chemical and petro-chemical industries and pollution-control equipment.

Backing up the AEC's commercial enterprises is the Corporate Marketing Department, whose brief is to steer the technology-oriented groups into "real world" demand markets and basically to find ways of taking abstract technologies and applying them in down-to-earth ways.

The main market sectors targeted by AEC Marketing are mining and metallurgy, chemical and petro-chemical, environmental, medical and pharmaceutical, engineering and fabrication, agriculture and aero-space.

Should the two business programmes of the AEC have products for these or any other markets it is Corporate Marketing's responsibility to plan and co-ordinate their promotion.

Von Gogh says: "The basic premise is to address market needs rather than push technology for its own sake."

For further information, please telephone Roland Von Gogh at (012) 316- 3270.

Tibetan Exiles Allege PRC Nuclear Activity

93WP0045A Calcutta THE STATESMAN in English 27 Oct 92 p 9

[Text] NEW DELHI, Oct. 26—The Tibetan Government-in-exile has alleged that China is "reportedly using the Tibetan hinterland for nuclear weapons tests and for dumping nuclear and other toxic wastes," reports PTI.

According to the government-in-exile's information and International Relations Department, Chinese authorities are alleged to have received huge sums of money from Western countries in the eighties for offering nuclear wastes disposal facilities in Tibet. It is not known whether the wastes were actually dumped.

In a document titled "atrocities on the roof of the world," the department also mentions a 1991 Green-peace report that revealed plans to ship toxic sewage sludge from the USA to China for disposal in Tibet.

Government Considers Signing CW Convention

OW0312092292 Beijing XINHUA in English 0901 GMT 3 Dec 92

[Text] Beijing. December 3 (XINHUA)—China is conducting a serious study on the issue of signing an international chemical weapons convention, a Foreign Ministry spokesman said here this afternoon.

In reply to a question about whether China will sign the International Chemical Weapons Convention adopted by the United Nations yesterday. Li Jianying said at the weekly press conference that China supports the purposes and objectives of the chemical weapons convention and is conducting a serious study on the issue of signing it.

Second Phase of Daba Thermopower Plant Approved

OW2611103392 Beijing XINHUA in English 0940 GMT 26 Nov 92

[Text] Yinchuan, November 26 (XINHUA)—The second phase of the Daba Thermo-Power Plant has been given the go-ahead by the central government.

The planned installed capacity of the plant is 2.4 million kw [kilowatts]. Two 300,000 kw generating sets installed in the first phase are already in operation.

It is planned that in the second phase another two generating sets of of the same capacity will be installed. In addition, the plant will be linked to the north China power grid.

The National Energy Investment Corporation and the Ningxia Hui Autonomous Region will share equally the 1.17 billion yuan of construction cost.

BURMA

Nuclear Nonproliferation Treaty Signing Announced BK0412014292 Rangoon Radio Burma in Burmese 1330 GMT 3 Dec 92

[Press release issued by the Ministry of Foreign Affairs, dated 3 December]

[Text] The Government of the Union of Myanmar [Burma] has been actively contributing to the UN's efforts in the quest for international peace and security, particularly in the field of arms reduction and disarmament with the ultimate objective of genuine and complete disarmament.

As a founding member of the Conference on Disarmament in Geneva, Myanmar has also been constructively engaged in ongoing disarmament negotiations. It firmly believes that nonproliferation of nuclear weapons, cessation of the nuclear arms race, and nuclear disarmament are vital for the prevention of the danger of nuclear weapons. On the other hand, it also believes that peaceful uses of nuclear energy and technology should be applicable to every nation for the benefit of all mankind under an impartial and effective international control.

In accordance with the conviction stated above and with the view to enhancing its firm commitment to the international peace and security, the Government of the Union of Myanmar has decided to accede to the Treaty on Nonproliferation of Nuclear Weapons.

The instrument of the accession to the said treaty has been deposited with the United States Department of State in Washington D.C. on 2 December 1992 which is one of two depositories of the treaty.

Thus, Myanmar becomes the 154th state to accede to the Treaty of the Nonproliferation of Nuclear Weapons.

CAMBODIA

SRV Embassy Spokesman Rejects Toxic Weapons Report

BK0512074992 Hanoi VNA in English 0715 GMT 5 Dec 92

[Text] Hanoi VNA December 5—The spokesman for the Vietnamese Embassy to the Supreme National Council (SNC) of Cambodia on Dec. 2 released the following statement:

"On Nov.14, 1992, the spokesman for the Khmer Rouge army falsely accused Vietnam of having 'planned to use toxic chemical weapons in the 1992-93 dry season in Cambodia."

The spokesman is authorized to flatly reject this slanderous charge of the Khmer Rouge. This allegation is aimed at inciting hostility against Vietnam, diverting public opinion in Cambodia and the world as whole as

which is strongly condemning the Khmer Rouge for blocking the peace process and covering up its military preparations for the 1992-93 dry season to undermine the implementation of the Paris agreements on Cambodia.

The spokesman reaffirms Vietnam had completely withdrawn its troops from Cambodia by September 1989 and has not sent any troops or weapons back to Cambodia ever since."

JAPAN

Policy of Hiding Plutonium Transport Data Eyed OW0412110892 Tokyo KYODO in English 1054 GMT 4 Dec 92

[Text] Fukui, Dec. 4 KYODO—Japan may ease its policy of hiding all information regarding the transport of plutonium and other nuclear materials, a top nuclear official indicated Friday.

Takao Ishiwatari, director of the quasi-governmental Power Reactor and Nuclear Fuel Development Corp., made the suggestion in response to a reporter's question on whether Japan will continue to hide all information on the transport of plutonium.

"There will be some scope (of information that may be disclosed) to respond to circumstances in tandem with social conditions," Ishiwatari told a news conference.

"As an official in charge of overseeing the (plutonium) shipment plan, I will have to consider the issue (on whether to disclose some information on such shipments)," he said.

Japan has refused to reveal the navigation route of a freighter carrying one ton of plutonium from an extraction plant in France.

The Science and Technology Agency issued a notification this spring instructing all autonomous bodies in which nuclear installations are located not to reveal any information on the route and timing of the transport of nuclear material.

"It is the fact that the French authorities revealed the information on the basis of their judgment," he said.

Ishiwatari is here to report to prefectural authorities that his institution is rescheduling an operation plan of the Monju Fast Breeder Reactor in Fukui due to a delay in the manufacturing of plutonium-based nuclear fuel rods for use in the breeder.

The plutonium now being carried by the freighter Akatsuki Maru is to be mixed with uranium in a plant in the village of Tokai in Ibaraki to manufacture special fuel rods, called "mixed oxide," to be placed inside the Monju breeder.

IAEA Meeting To Focus on Surplus Plutonium Problem

OW0412053392 Tokyo KYODO in English 0434 GMT 4 Dec 92

[Text] Tokyo, Dec. 4 KYODO—The International Atomic Energy Agency (IAEA) will be seeking answers to the problem of a worldwide surplus of plutonium at a meeting in Vienna next week, Japanese Government sources said Friday [4 December].

The IAEA meeting scheduled for Monday and Tuesday is expected to discuss the growing surplus of the highly toxic radioactive material prompted by the dismantling of nuclear weapons with the end of the cold war era. The gathering will also discuss policies to guard against nuclear proliferation, the sources said.

According to preliminary calculations by the IAEA, there will be a surplus of 110 tons of plutonium from peaceful use alone by 2000, and with the dismantling of nuclear weapons, the surplus is expected to exceed 200 tons.

The meeting is expected to discuss ways to stockpile and manage the excess plutonium by individual countries and also the creation of an international system of control, which has been the topic of IAEA discussions since the 1980's.

Agency Moves To Prevent Buildup of Excess Plutonium

OW0612041392 Tokyo KYODO in English 0345 GMT 6 Dec 92

[Text] Tokyo, Dec. 6 KYODO—The Science and Technology Agency is planning to store temporarily used fuels obtained from nuclear power plants to prevent a buildup of excess plutonium, agency sources said Sunday [6 December].

The agency aims at cutting back the supply of plutonium to be reprocessed from the used nuclear fuels, forecasting that the nation's demand for plutonium is unlikely to increase as much as had been expected in the coming decades, the sources said. The agency expects the temporary storage will reduce operations at a nuclear fuel reprocessing facility, planned for construction in the village of Rokkasho, Aomori Prefecture, in northern Japan. The plan is based on Japan's basic policy of not possessing unnecessary plutonium, the sources said.

Under the agency's original plan, the plutonium supply was expected to reach 85 tons by 2010, including 30 tons enriched and shipped from Europe, and 55 tons reprocessed at domestic plants. The agency had expected the supply to meet the demand for fuel, which was forecast to be 30-40 tons at fast-breeder reactors, and 50 tons at existing nuclear power plants. Some scientists doubt if the existing nuclear plants can consume 50 tons of plutonium because it costs more than uranium fuel.

The sources said it is wise to cut down the operations of the Rokkasho plant, which can enrich 800 tons of used nuclear fuel to produce about five tons of plutonium a year. Reduced operations at Rokkasho, however, means that used fuels from the nation's nuclear power plants must be stored temporarily at some sites.

For the proposed sites, the agency is considering storing the material in water pools and at warehouses at the premises of the nuclear power plants, the sources said. The agency has started investigating the safety and economic aspects of temporary storage both under water and at warehouses.

The Rokkasho plant, to be constructed by Japan Nuclear Fuel Co., also will have a radioactive waste storage center, and temporary storage there is also possible, the sources said. The entire facility of the Rokkasho plant will not, however, become fully operational until after the turn of the century.

New Technologies Studied for Nuclear Plants

OW0812095292 Tokyo KYODO in English 0903 GMT 8 Dec 92

[Text] Tokyo, Dec. 8 KYODO—Japan's electric power companies are studying the possibility of building nuclear power plants on less solid structures than commonly used bedrock, industry sources said Tuesday.

The sources said the industry, in an effort to solve the difficult problem of securing new sites for the unpopular nuclear plants, is considering building facilities on the sea, underground, or softer grounds than bedrock.

The idea received a government panel's backing at a meeting last week, which said there is "a need to study (such possibilities) from a medium-to long-term point of view in order to widen the options of nuclear sites."

The Central Research Institute of the electric power industry, a think tank participated in by Japan's nine electricity firms, has already launched research concerning technologies needed to build nuclear plants on such sites. A report on the ongoing research is scheduled to be completed in three years.

The institute of energy economics, another privatesector think tank, released a report last spring on the feasibility of underground plants as well as two other possibilities.

Each of the three possibilities is considered "technologically feasible," especially on softer ground sites, according to studies made thus far. Tokyo Electric Power Co. and the Central Research Institute jointly built a model for nuclear plants on softer grounds in Taiwan.

Problems remain, however, on whether the plants would be economical and whether communities would accept them, the sources said. Despite such hurdles, however, the industry sounds optimistic, with one industry official saying, "I am confident these new methods will become a reality in the near future."

First Radioactive Waste Delivered to Storage Center

OW0812023892 Tokyo KYODO in English 0214 GMT 8 Dec 92

[Text] Rokkasho, Aomori Pref., Dec. 8 KYODO— Japan's low-level radioactive waste storage center took its first load of waste Tuesday—a shipment that arrived by sea and road from a nuclear power plant in Ibaraki Prefecture.

A spokesman for Japan Nuclear Fuel Ltd., operator of the Rokkasho storage facility, said the waste was in 1,480 drums and came from a nuclear power plant run by the state-run Power Reactor and Nuclear Fuel Development Corp. at Tokai in Ibaraki Prefecture.

The drums were shipped from Tokai to Rokkasho in northeastern Honshu via the nearby port of Mutsu Ogawara.

Guarded by riot police, 12 trucks began ferrying the 200-liter drums from the port to the facility about nine kilometers away. Placing the drums in storage will take until late Wednesday, the spokesman said.

The storage facility is part of the Rokkasho Nuclear Fuel Cycle Center, which has an already-operating uranium enrichment plant and a fuel reprocessing plant to produce plutonium from spent nuclear fuel that is due to start operating next March.

The facility has a current capacity to store 50,000 drums, but ultimately will take about 60 years worth of waste, or some 3 million drums, from domestic nuclear facilities. The plan is to store the waste for about 300 years.

The nation's nuclear power plants currently hold about 480,000 barrels of waste.

The nuclear power industry plans to ship some 25,000 to 50,000 barrels to the facility each year.

The reinforced concrete facility is more than 10 meters below ground in bedrock to make it hard for groundwater to seep in.

Completion of the 160 billion yen facility was delayed for 18 months because of the need to redesign it to ensure it would not contaminate groundwater.

Fishermen in the region have expressed concern about the sea transportation of the waste as the route off northeastern Honshu is the scene of frequent accidents, particularly in spring and summer when the area is prone to fog.

The specially equipped 4,053-ton transport ship Seiei Maru will ferry up to 3,000 drums on each of more than

10 trips a year to bring waste from nuclear power stations to the Mutsu Ogawara Port.

To guard against collisions, the ship has two radars and is double hulled to prevent it from sinking.

In June, a Maritime Safety Agency vessel collided in thick fog with a cargo ship off Hachinohe, about 50 kilometers south of Rokkasho.

In an area known for its high squid catch, the incident prompted worries among the fishing fraternity about loss of sales because of fears of contamination in the event of an accident.

To add to the concern, high-level radioactive waste will also be transported from 1995 on completion of a high-level waste storage facility at the same center.

The Rokkasho facility is the first of its kind in Japan for storing low-level radioactive waste such as cleaning water and work clothes from domestic nuclear power plants. The waste is set in concrete inside the drums.

It is the second fully operating facility at the center. The uranium enrichment plant began commercial production in last March.

NORTH KOREA

IAEA Said To Uncover Concealed Nuclear Facilities

SK0112141092 Seoul KBS-1 Television Network in Korean 1200 GMT 1 Dec 92

[Text] It has been revealed that North Korea has nuclear facilities which have not been reported. The concealed nuclear facilities were uncovered during the North Korea inspections conducted by the International Atomic Energy Agency [IAEA] on four occasions. North Korea sent yesterday its minister of atomic energy industry to IAEA Secretary General Hans Blix, to clarify this. Reporter Cha Man-sun reports from Vienna.

[Begin reporter Cha Man-sun recording] Choe Hak-kun. North Korean minister of atomic energy industry. O Chang-nim, roving ambassador, and four others visited IAEA Secretary General Hans Blix on the evening of 30 November and held talks for over two hours to discuss North Korea's sincere implementation of nuclear agreement in the presence of the IAEA inspector in charge of the North Korean nuclear inspections.

Photograph-taking was not allowed at the conference room and the content of the talks was not made public at all. According to specialists here, it is believed that during the talks, the secretary general notified North Korea of the new fact that North Korea has not reported some nuclear facilities, which was unveiled as a result of the inspections conducted on four occasions and urged it to sincerely implement the nuclear agreement.

According to these specialists, the IAEA attempted to send the special inspection team to North Korea right after the IAEA finished the fourth inspection of North Korea last month. North Korea refused this and instead a North Korean nuclear policy decision-maker met the secretary general just before the board of governors meeting for a report of the inspection results was convened. This proves the fact that North Korea has concealed nuclear facilities.

In the meantime, the IAEA will send the fifth tentative inspection team to North Korea in the middle of this month and will conduct more comprehensive inspections. [end recording]

SKNDF Calls News Conference on N-Arms in South

SK0412005892 Pyongyang KCNA in English 1536 GMT 3 Dec 92

[Text] Pyongyang December 3 (KCNA)—The Pyongyang mission of the National Democratic Front of South Korea [SKNDF] (Hanminjon) called a press conference today on the nuclear arms development promoted by the South Korean authorities.

Present at the press conference were newspaper, news agency and radio reporters in Pyongyang and foreign correspondents here.

At the conference, Cho Il-min, chief of the mission, read the "Open Letter on Nuclear Arms Development in South Korea" issued by the Hanminjon Central Committee on Nov. 16.

He told reporters that the open letter clearly proved the falsity of the "Declaration on Denuclearization" made by No Tae-u in November last year.

South Korea where 1,700 U.S. nuclear weapons are deployed has turned into a terrible nuclear arsenal under the South Korean authorities' anti-peace policy of nuclear arms development, he said.

Hanminjon hopes that the South Korean people and progressive conscience of th world cherishing peace and reunification will seriously consider South Korea's nuclear armament, build up public opinion against it and join in the struggle to check and frustrate it, he stressed.

He answered questions put by reporters.

Renewal of Russian Nuclear Technology Aid Sought

SK3011130592 Seoul YONHAP in English 1245 GMT 30 Nov 92

[Text] Seoul, Nov. 30 (YONHAP)—North Korea has recently asked Russia for the renewal of atomic energy technology assistance which has been suspended in the wake of the collapse of the Soviet Union, the Radio Moscow reported over the weekend.

According to the NAEWOE PRESS, Russia's first Atomic Energy Vice Minister V.F. Konovalov, now in Tokyo attending a Japan-Russia nuclear meeting, disclosed this in an interview with the ITAR-TASS news agency Saturday.

The Radio Moscow quoted the Russian official as saying he believes renewed technical cooperation would be possible between his country and North Korea on atomic power plant.

Konovalov said, however, if Russia-North Korea cooperation were to be resumed, Russia should ensure commercial feasibility while North Korea should first respect all regulations of the International Atomic Energy Agency (IAEA).

If these conditions were met, he said, Russia could extend technical assistance in the construction of several atomic power plants in North Korea, NAEWOE said.

Under a 1985 agreement, the former Soviet Union was to assist in the construction of a 1.7-million-kw atomic power plant with four atomic reactors in Sinpo along the east coast of North Korea.

An advance survey of the area was made before the project was suspended due to the fall of the Soviet Union.

New Nuclear Facilities Reportedly Built

SK0112141992 Moscow Radio Moscow in Korean 1200 GMT 1 Dec 92

[Text] According to ROK intelligence sources on I December, new nuclear facilities are being built in North Korea. An AP news agency reporter said that the ROK has some photos taken by U.S. intelligence satellite on nuclear facilities in North Korea. The photos clearly show that the facilities exists in an area near the large-scale (?general nuclear facility) of North Korea. These photos also clearly show the unrevealed constructions.

This area is located in the North, 100 km from Pyongyang.

SOUTH KOREA

IAEA Nuclear Research Cooperation To Be Extended

SK0412091792 Seoul YONHAP in English **0644** GMT **4** Dec 92

[Excerpts] Seoul, Dec. 4 (YONHAP)—South Korea is to inform the Philippine Government Dec. 11 that it accepts the general regulations of the Asia-Pacific Postal Union and the Asia-Pacific Postal Convention, the Foreign Ministry said Friday. [passage omitted]

On Friday, the government submitted a document to the director-general of International Atomic Energy Agency

[IAEA] accepting the extension of the regional cooperative agreement for research, development and training related to nuclear science and technology, 1987

The agreement covers mutually cooperative projects, including research, development and training in the peaceful use of nuclear power among member countries in the region.

Envoy to Vienna on Future Nuclear Inspections

SK0412135892 Seoul KBS-1 Television Network in Korean 1235 GMT 4 Dec 92

[By Cha Man-sun in Vienna]

[Text] The report on the implementation of the inspection of North Korea's nuclear facilities, which was submitted by the International Atomic Energy Agency [IAEA] Secretary General to the Board of Governors, suggests on several occasions that nuclear-related facilities that were not originally disclosed, were discovered. In particular, it contains a strong will that rather than making these facilities open to the public, thorough inspection will be carried out on suspicious facilities.

What supports this is the fact that the IAEA will dispatch its fifth investigation team to North Korea soon: it plans to separately dispatch an IAEA high-ranking official for the inspection of the unreported bases. Moreover, the media has much interest in the results of the nuclear inspection in North Korea but Hans Blix said that he will adhere to the principle of holding the inspection behind closed doors.

Secretary General Hans Blix also said that he discussed in detail the results of four different inspections with North Korea's Nuclear Industry Minister Choe Hakkun, and said that these talks will aid chances for upcoming inspections. It is interpreted that this is an important part that suggests that a vulnerable point has been found concerning the suspicions of North Korea's nuclear development.

[Video then shows ROK envoy to Vienna Yi Si-yong] [Begin recording] North Korea, through the minister of nuclear industry, has shown a very positive response. Therefore, we believe there is the possibility for more nuclear inspections in the future. [end recording]

In the Board of Governors meeting, some 20 member countries including the ROK said that the nuclear inspection, which North Korea is calling for, and the issue of the Team Spirit exercise are two separate matters and that the international agreement should be implemented without fail. They also urged that North Korea respond to an early South-North mutual inspection to enhance trust to achieve the denuclearization of the Korean peninsula.

Proposed JNCC Meeting Hints at Policy Changes SK0212074592 Seoul CHUNGANG ILBO in Korean 2 Dec 92 p 2

[Text] Choe U-chin, chairman of the North side to the North-South Joint Nuclear Control Committee [JNCC], sent a telephone message to Kong No-myong, the South side's chairman, on 1 December. He proposed in the message the holding of the 12th JNCC meeting on 8 December at the House of Peace in the southern portion of Panmunjom.

Meanwhile, at the 11th meeting held on 27 November, the North side said that it could not attend any North-South dialogue, including JNCC meetings, unless the South side announced by the end of November that it would suspend the Team Spirit exercise. It also rejected the South side's proposal that the 12th meeting be held on 10 December.

The North side proposed holding the 12th JNCC meeting even though the South side did not notify the North by the end of November that it would suspend the Team Spirit exercise. This means that there is a possibility that in connection with a Supreme People's Assembly meeting scheduled for 11 November. North Korea may change its nuclear policy and its policy toward the South. This possibility is noteworthy

In view of the on-going election campaign in South Korea, North Korea's decision can also be interpreted as a ploy to maintain a dialogue channel to continue its smear campaign regarding the Team Spirit exercise.

North's Nuclear Arms Production Capability Eyed

SK0512032092 Seoul YONHAP in English 0304 GMT 5 Dec 92

[Text] Vienna, Dec. 5 (YONHAP)—International concern over North Korea's ability to produce nuclear weapons heightened following a published report that it was able to make more than 200 kilograms of plutonium a year in the 1970's.

Contrary to a general belief, the bulletin of the atomic scientists said recently, North Korea was already capable of producing 200 kg to 260 kg of weapons-grade plutonium a year in the mid-1970s and 200 kg of plutonium could make about 30 "small-sized" atomic bombs

In a special article on North Korea's plutonium production, the bulletin said North Korea reported to the Internatinal Atomic Energy Agency (IAEA) that it extracted "gram-unit" plutonium for the first time in March 1990.

The bulletin said that North Korea was in fact able to extract laboratory size plutonium in "hot cell," located in Pyongyang, in the 1970's. The bulletin of the atomic scientists is a U.S. publication often quoted by U.S. and German Government officials as well as IAEA experts.

North Korea is insisting that plutonium it extracted in 1990 was from the damaged nuclear fuel used in the 5-megawatt experimental reactor in Yongbyon, north of Pyongyang.

But IAEA experts point out that North Korea is currently capable of processing much larger amounts of nuclear material than it is actually reporting to the IAEA at the radioactive chemistry laboratory in Yongbyon, the bulletin said.

The experimental reactor in Yongbyon could produce? 4 kg to 7 kg of plutonium a year since 1985 but North Korea reported that it could not produce that much because of operational problems.

In order to confirm the report, the IAEA wanted to obtain samples of North Korean nuclear fuel but North Korea said it could not exchange nuclear fuel until early 1993. Thus the IAEA was forced to wait until North Korea is ready to provide it with the sample, the bulletin said.

BULGARIA

Technologist Comments on Kozloduy N-Plant Safety

AU0512160392 Sofia BULGARSKA ARMIYA in Bulgarian 30 Nov 92 p 1

[Interview with Georgi Nedyalkov, a technologist specializing in nuclear safety systems and testing of metal structures, by Luchezar Lozanov; place and date not given: "Overplayed Concern for Nuclear Plant Safety Makes Us a Tasty Dish for the Foreigners"]

[Text] The reconstructed No. 2 Reactor Unit at the Kozloduy Nuclear Power Plant is due to be started up at the end of the year. I asked Georgi Nedyalkov to comment on the justified public concern:

[Nedyalkov] Almost all the pressurized systems in our plant are considerably overdimensioned in their design, as compared with their Western counterparts. A Belgian specialist told me about a specific problem. A pipeline at their nuclear plant that carried superheated steam from the reactor to the turbine was corroding very quickly, so the Belgians replaced it with pipes made of chromemolybdenum steel, one meter of which cost as much as a Mercedes. At our plant these pressurized structures are made from 20-percent chrome alloy steel. This design solution is much more reliable. Similar comparisons can be made regarding the construction of the actual reactor bodies: A considerable amount of metal is used, and the wall thicknesses are greatly overdimensioned because in many cases the aim is not to achieve economic savings, but to guarantee security.

According to the specialists, the Nos. 1 and 2 Units at the Kozloduy Nuclear Power Plant are among the safest in the world in this respect. Here, I am not referring to the electronics systems, which are far more efficient in Western countries. The refitting of some of the reactor units at the Kozloduy Nuclear Plant and the provision of 300-percent protection as against the previous 200 percent is being carried out with the assistance of international experts, a international consortium, and international organizations. Problems with safety standards still exist, but they are not of such a nature as to pose a danger to the lives of people living near the plant.

The hysterical tone of certain ecology campaigners and items written by foreign journalists coincide in time with the market interests of the West European manufacturers. Here is an example. When one of the Kozloduy units was shut down due to a pump defect, the furor raised in the press led to the cost of the pump rising within a few days from \$24,000 to \$540,000. Many more things still have to be done to ensure exemplary safety, but most of them cost money, and a lot of money at that. Accordingly, one should not forget that excessive hysteria may make huge holes in our exhausted state budget that have nothing to do with our national interests, because for the moment we have no alternative but to keep our nuclear power plant.

CZECHOLSLOVAKIA

Red Mercury Deals in Russia Described

AU0312172992 Bratislava NARODNA OBRODA in Slovak 28 Nov 92 p 12

[Unattributed report: "He Bought Red Mercury"]

[Text] The customs officer at the Ruzyne airport said good evening and waved his hand at me. I took my bag and entered the airport hall. At the bottom of my case, among the exposed films and cameras, there were several vials containing a sample of the material whose chemical formula is Hg2Sb2O7. Red mercury [preceding word published in English] has become famous from the Mosnov airport affair. I have smuggled a strategic material used, according to the British physicist Barnaby, for the production of small nuclear bombs in Saddam's Iraq. Iran, Algeria, probably Israel, and Qadhdhafi's Libya. This is what M. Mrnka writes in PROSTOR no. 199. As M. Beran from the Central Analytical Laboratory of the Nuclear Research Institute in Rez says, this is a material whose discovery can be compared to that of hightemperature superconductivity. Instead of nuclear bombs, which he thinks improbable, the material is used. in his opinion, in infrared military lasers.

Six months of lasting efforts were not in vain. As a businessman from an anonymous Czech firm, a firm who is interested in buying a container of red mercury, that is 70 kilograms of red mercury. I had success. In one case I almost ended up in concluding a contract for more than half a million dollars. The authenticity of the imported samples was confirmed in an affidavit sent by fax from the Institute of Nuclear Research in Rez. The chemical name of the said material is mercuric-antimony oxide [kyslicnik ortutnato-antimnicny]. According to available information, this is a first case ever in which a reporter succeeded in buying red mercury.

The PROSTOR editorial staff bought the sample of the mysterious red mercury for \$560 in Vladivostok. The price for a kilogram is between \$5,000 and \$70,000 on the Russian black market, depending on the type of red mercury, whether it has a certificate of chemical and physical analysis or not. In Czechoslovakia, its price rises up to \$250,000 and, according to THE SUNDAY TIMES, it is sold for up to 1,000,000 pounds in Britain. Red mercury appears in two basic forms on the market. Contrary to general opinion, it is not radioactive. It is impossible to rule out the possibility that has been is used as a cooling liquid in small nuclear reactors, where it may have been under strong radiation. The two forms are: brown powder of a steel-like color, and red liquid.

According to our Russian informers, this mercury is being produced in a closed—closed even today—super-secret Siberian town, Krasnoyarsk 25, from which Russian nuclear bombs of classical construction also come. Nonradioactive Hg2Sb2O4 is produced in limited quantity also in some research institutes, for instance, in

Novosibirsk. From these sources, Russian enterprises can buy it for a ridiculous price in rubles. Records are kept; however, a license is necessary to export it abroad. It is a complicated matter to acquire this license. "The system is simple," one of the red mercury dealers said. "I buy a certain quantity, and then I let my warehouse burn down, and report it officially. By that time, the shipment is safely across the border.

HUNGARY

Tripartite Talks Continue on Nuclear Fuel Storage

AU0612175892 Budapest NEPSZABADSAG in Hungarian 1 Dec 92 p 5

[Unattributed report: "No Danger of Radiation at Paks"]

[Text] The tripartite Hungarian-Russian-Ukrainian talks are continuing on returning the spent fuel elements of the Paks Nuclear Power Station to Russia. If Ukraine does not give a transit permit and the Russians do not receive any more deliveries, then temporary storage has to be created at Paks, otherwise some units would have to be stopped in three years' time. Journalists were informed on this after the Monday [30 November] session of the National Nuclear Energy Committee.

The annually 500 spent fuel elements could be placed in the current storage area until 1995. The implementation of the construction that is currently in the preparation stage can begin in 1994. According to the plans, a central building and a storage space suitable for holding the spent elements of six years of production would be created for 1.7 billion forints. The first unit of this could begin to be filled as early as 1995.

The committee dealt with the 10-year radiation protection inspection of the Paks Nuclear Power Station. On the basis of this, it can be established that in the immediate area and in a 30-kilometer radius area of the power station, the amount of radioactive gases or liquids is extremely small; it is only a small proportion of the background values and is less than the world average of nuclear power stations that operate with a similar reactor. This amount is so small that it can only be measured at the point of emission—for example, in the ventilation smokestack or the water outlet—but it cannot be traced in the environment where it is diluted. The radioactivity received by the population is one-thousandth of the permitted limit and one-tenthousandth of the natural environmental radiation.

The committee discussed and accepted a proposal to establish a national environmental radiation protection control system. This integrated system would implement a coordinated control program with a unified data basis and computer processing, under the coordination of the National Radiation Biology and Radiation Hygiene Institute.

The meeting also discussed the environmental effects of uranium mining and environmental tasks.

Research Reactor Refurbished, Ready To Start Up

AU0112133892 Budapest NEPSZABADSAG in Hungarian 25 Nov 92 p 16

[Report by Istvan Palugyai: "Csilleberc Before Start—Security Is Paramount"]

[Text] On 2 December, there will be an open forum at the Central Physics Research Institute [KFKI] on the starting of the experimental nuclear reactor. What will the experts talk about? What is the purpose of this establishment? Although even in 1992, it was written that there is a secret surrounding it, since its original implementation in 1959, it has often opened its doors to the public, while it operated.

In 1986, a large overhaul began, in the course of which most of the 30-year-old outdated equipment was replaced. As we were informed by Janos Gado, director of the Atomic Energy Research Institute, in the more modern and more secure reactor, the equipment of the whole primary and secondary circuits has been replaced by new equipment, just as the used pipelines, and a new neutron-supply unit, a "beryillium-reflector," has been fitted. As a result of all this, the five-megawatt performance has increased to 10 megawatts.

The 1-billion forint investment that was completed with the help of the International Atomic Energy Agency [IAEA], was finished two years ago, but the reactor is still not working. This equipment is almost indispensable for research into material structure and solid physics, for producing medical and industrial isotopes, and for all kinds of experiments using neutrons. As many old research reactors have been closed down abroad in recent years, a considerable domestic and foreign interest has already been shown toward the services of the equipment at Csilleberc [Budapest] which is seen to be at a good medium level in international comparison.

On the basis of its technical qualities, this reactor could be a basis for the physicists of the Central European region, in addition to the synchrotron in Trieste. It could be specially useful in producing medical isotopes because there have been constant problems with the supply of regiating materials used in various examinations.

However useful and modern a nuclear reactor is, even if it is for research and is small, nuclear safety is still a central issue.

"We built in a new security protection logic at Csilleberc," Janos Gado emphasized. It is a so-called "integrated [beegetett] software" designed by us, which is much more reliable than the previous one.

The isolation of the reactor building has also been increased so that no harmful radiation can get to the outside air in an uncontrolled way. The secondary circuit

has also been turned into a closed system, which also increases safety. In the research reactor, the water circulates at atmospheric pressure at 60 to 65 degrees, which is much safer than the high-pressure versions.

The storage of the burnt-out fuel elements is the other delicate point of the system that is supervised by the IAEA. This is usually done by the 500 research reactors themselves that have so far been built in the world because these are only small amounts (the waste at Csilleberc is only a few thousandths of the amount produced by Paks nuclear power station.) The KFKI also set up storage on its territory, and this has now been extended. This is in accordance with the safety regulations and is able to receive the fuel elements for five years. In the meantime, there are talks on returning the active elements to Russia, although, in the case of research reactors, the producing country has never before taken into consideration the requirements of any of the partners.

The licensing procedure to start the reactor was also carried out according to international regulations. For the time being, it has fuel sufficient for four years.

It is part of the plans that an international scientific council may be set up to coordinate future research, and the production of isotopes would be supervised by the Isotope Institute.

That is, if this is ever given a green light. Referring to the worries of the people living in the neighborhood, Gado certainly puts us at ease.

"We would like to improve people's image of the reactor by regular monthly visits."

We will soon find out whether they will succeed in this. The reactor is ready for start.

EGYPT

U.S. 'Pressure' on Signing CW Treaty Viewed

NC3011120592 Cairo AL-SHA'B in Arabic 24 Nov 92 p 1

[Report by 'Abd-al-Sattar Abu-Husayn: "U.S. Pressure on Egypt To Sign Treaty on Chemical Weapons"]

[Text] AL-SHA'B has learned that the United States recently put intense pressure on Egypt to force it to sign the treaty banning the proliferation of chemical weapons, which is scheduled to be endorsed by the UN early next year.

Sources say the U.S. pressure followed Egyptian activity on the Arab level that sought to draft a unified Arab stand linking the Arab states' signing of this treaty with Israel's agreement to establish a zone free of mass destruction weapons and sign the treaty for the nonproliferation of nuclear weapons. Israel's signature on this treaty would place its nuclear installation under international inspection. The U.S. Administration has dispatched the U.S. assistant secretary of state for defense affairs to Cairo to persuade officials to sign this treaty, claiming that such a step would create what he called the atmosphere of confidence necessary for making the current negotiations succeed. The U.S. official stressed that Israel will sign the treaty to encourage the Arab states to follow suit.

The same sources added that there are increasing fears of several Arab states signing the treaty, so depriving the Arabs of an element of pressure on Israel, compelling it to subject its nuclear installations to inspection and destroy its arsenal of nuclear weapons. The sources added that the U.S. Administration sets out the Arab states' signature on this treaty as a condition for it to exercise a more effective role in the so-called peace process, as the U.S. official claimed.

During his recent talks in Cairo last week, Israeli Foreign Minister Shim'on Peres refused any talk of raising the issue of Israel's nuclear arsenal in the current talks.

Electricity Minister Says Uranium Ore Discovered

NC0412110192 Cairo MENA in Arabic 0951 GMT 4 Dec 92

[Excerpt] Cairo, 4 Dec (MENA)—Minister of Electricity and Energy engineer Mahir Abazah has said that uranium ore has been discovered in four sites in Egypt—Jabal Jibtar [place-name as received] in al-Ghardaqah, the al-Massakat al-'Arabiyah [place-name as received] area between Safaja and Qina, the southeast of Aswan, and the Abu Zanimah area in southern Sinai In an exclusive statement to the Cairo newspaper AL-MASA', he said that the discovered quantities are sufficient to meet the needs of the Egyptian nuclear program for peaceful purposes for a long time. He said that these sites are being developed for maximum use.

Abazah said that legislative rules governing nuclear activities will be prepared to protect man and environment from any dangers that might result from the use of nuclear energy. [passage omitted]

INDIA

U.S. Blamed for Pakistan's Nuclear Capability

BK0512114192 Delhi All India Radio General Overseas Service in English 1010 GMT 5 Dec 92

[Commentary by Virendra Mohan Trehan: "Pakistan's Nuclear Program"]

[Text] The revelation of the American TV network that Pakistan has built at least seven nuclear weapons, each of the size of the bomb that destroyed Hiroshima, and that Pakistan was going to use the bombs last year in February when India was busy in a military exercise may be embarrassing for some but is surprising to none. The timing of the disclosure is a trap being laid on India to sign NPT [Nuclear Nonproliferation Treaty] without getting it modified to make it universal in character. It also provokes the policymakers to see the writings on the wall and come down from the idealistic and moral approach in dealing with the security of the nation. It should also be a cause of concern for all those who look for a nuclear-free world.

After six months of investigation, the American TV network finds out that Pakistan has at least seven nuclear weapons of the size which destroyed Hiroshima and that the Pakistani military built its arsenal with help from the USA and other Western countries, using a lot of deceit. Through CIA Senator Larry Pressler knew how far Pakistanis have come, that is, Pakistan has the capability within a matter of hour to have a bomb in an airplane and flying it somewhere and dropping it. It means when President Bush was putting pressure on India to sign the NPT, the U.S. Commerce Department was acting as procurement agent for Pakistan. Pakistan agents were having a field day getting whatever they wanted in the USA and Western Europe. Commerce Department was letting Pakistan buy weapons technology by the tens of millions of dollars. It may be a big Pakistani scam for Senator John Glenn and Senator Pressler but not for President Bush

The revelation also proves what India has been telling the U.S. and the world all along. Pakistan has been throughout playing double game, manufacturing nuclear bombs for its arsenal and getting India bound not to manufacture a nuclear device under the garb of one proposal or the other. Senator Pressler has echoed the feelings of many of his countrymen when he told American TV network, I quote, I wish we had more of aid cuts to Pakistan, unquote.

Regrettably, a nuclear Pakistan is Washington's own creation. Had the U.S. spent even a tenth of the energy it has spent trying to put India in a dock over NPT by putting embargoes, it might have stopped Pakistan from getting hold of nuclear detonator. Can USA even now stop Pakistan from selling them to Iran and other fundamentalist Muslim regimes? Will President-elect Bill Clinton force Pakistan to destroy its nuclear arsenal? It puts at stake the sincerity of the U.S. in seeing the world free of nuclear and chemical weapons. In fact, it is only the USA that supplied to Pakistan ultra sophisticated computers, oscilloscopes, and other critical equipment. The U.S. double standard has become fairly clear.

The timing of the disclosure of Pakistan nuclear capability is also meaningful. In fact, Director of CIA Robert Gates had made this information public a year ago. Just over two months ago, a study by the Stockholm International Peace Research Institute had said that Pakistan is having enough enriched uranium to make about a dozen bombs. Even on two occasions, Pakistan had openly admitted possession of the bombs during Operation Brasstacks in 1986 to an Indian journalist Kuldip Nayyar and in February this year when Kashmir was boiling and Pakistan was apprehending retaliatory reaction from India. This had made Robert Gates to come to India and Pakistan on a peacekeeping mission. It has now been made known again after Bill Clinton has made nuclear nonproliferation one of his major foreign policy goals.

It is the time Narasimha Rao government to make the country go nuclear to counter the threat posed by Pakistan before the USA, other Western countries, and Russia put pressure on India. [sentence as heard] Any delay on India's part in procuring a nuclear weapon could prove counterproductive for the country's defense preparedness. India could also consider destroying Pakistan's nuclear capability as one of the options to meet the threat if the USA fails in its duty in destroying the same. The world opinion must be mobilized against Pakistan through diplomatic and other channels. Pakistan has always regarded India as its enemy and now she is emboldened by the enlargement of so-called Economic Cooperation Organization which hitherto comprised Pakistan, Iran, and Turkey and has far-reaching implications.

Editorial Urges Government To 'Go Nuclear'

BK2311050792 Bombay NAVBHARAT TIMES in Hindi 14 Nov 92 p 4

[Editorial: "India and Bomb"]

[Text] The United States once again tried to get India to sign the Nuclear Nonproliferation Treaty [NPT] during the recent India-U.S. official-level tasks in Washington. The United States has of late put forward many proposals in this context, but it did not receive a favorable response from India. India is of the view that the NPT should not be looked at from a regional angle, but be viewed on a global-level. A prominent U.S. analyst

recently suggested that if the United States promises nuclear cover to India, it should then sign the treaty. But the question arises as to why should the United States agree to such a condition. If it provides security cover to India, it will have to give a similar facility to Pakistan. Of Pakistan's nuclear capability, it is being admitted today that it is on the threshold of making a nuclear bomb. There is, however, no guarantee that Pakistan will admit to possessing the bomb even after making one.

One lobby in India has been consistently advocating that we should go nuclear. All the nuclear powers in the world had signed the NPT only after making the bomb. The current treaty expires in 1995. The international equation has changed since the end of the cold war. It is obvious that the new treaty will be different in nature, but India could not be forced to sign it. So, it will be proper for India not only to make the bomb right away, but formally declare to having done so because only the powerful are in a position to force agreements in their favor. Any bargaining from this position of strength will definitely be in India's favor. India has already successfully tested the medium-range missile system and the West recognizes that India has the capability of targetting medium range missiles with nuclear warheads. Eveybody knows that in spite of the 1974 Pokharan nuclear test. India has not declared its intention of making the bomb. It has been insisting that its nuclear program is only for peaceful purposes. Even then, the West suspects that India might have manufactured the bomb. Why should we not come forward and declare that we are manufacturing the bomb? If we are expected to make a renunciation after acquiring the bomb, we have the right to expect the same renunciation from others as well.

IRAN

German Intelligence Says Iran Building Nuclear Bomb

AU0712102792 Hamburg WELT AM SONNTAG in German 6 Dec 92 p 26

[Report by Michael J. Inacker: "Federal Intelligence Service: Iran Deceives International Atomic Energy Organization and Works at Atom Bomb"]

[Text] Hamburg—Concerns in the West about an "Islamic" atom bomb are increasing. According to German intelligence service information obtained by DIE WELT, a number of facilities are currently being built in Iran that will allow the country to develop and produce an Iranian nuclear weapon.

According to information of the Federal Intelligence Service (BND), which was summarized by the Bundeswehr Office of Military Intelligence in a confidential paper in September. Iran has "energetically worked at setting up nuclear research facilities" since 1983. The objective is "to have a good command of the entire nuclear fuel cycle and thus the ability to produce nuclear warheads."

According to the German intelligence analysis, the "facilities that have been built so far and the equipment and materials procured" above all from China, but also from some European countries, "are indispensable for the production of nuclear weapons." The facts "cannot leave any doubt about Iran's intention to produce nuclear weapons."

Research is currently being done in five centers, the largest of which is the Isfahan nuclear research center. The PRC in particular has been involved in the expansion of this center since 1985. Its tasks include reactor technology, the nuclear fuel cycle, uranium enrichment, and uranium reprocessing. According to the BND paper, Isfahan will "in the future be Iran's most significant nuclear research facility." It must be assumed that "under the cloak of peaceful nuclear research, militarily oriented work is also carried out in this intricate large complex."

According to the same information, Iran also intends to build two nuclear power plants. In Gorgan on the Caspian Sea, a power plant with two reactors of the most modern Russian VVER 440 type will be set up in cooperation with the CIS. CIS experts reportedly have already examined the site. Even though, according to Western information, geologists would prefer to set up the plant elsewhere "because of the danger of earthquakes there," Iran insists on the proximity to the Islamic republics of the CIS.

The second power plant will be built in Darkhovin in southwestern Iran with Chinese help. Pakistan also intends to have the Chinese build a power plant of the same type. According to Western information, Iran has already agreed on "nuclear cooperation" with Pakistan, which is a nuclear threshold country.

It is true that "owing to their technical construction," the nuclear power plants would not be suitable for the production of weapons-grade plutonium. But as civilian nuclear facilities they can be "used as an alibi for other nuclear technical activities that in reality serve military purposes."

The German intelligence services see this alibi function confirmed by the fact that Iran intends to cover up its military nuclear ambitions by means of "disinformation, insufficient reports, too brief inspection periods, and the refusal to give access to certain buildings" for inspections by the International Atomic Energy Organization.

In view of the continuing proliferation of mass destruction weapons, Fritz Wittmann (Christian Social Union), chairman of the Bundestag Defense Committee, demanded that the Federal Government finally present a conclusive foreign and security policy concept. Rafsanjani Visit to 'Secret' Nuclear Center Eyed NC0312203992 Tehran JAHAN-E ESLAM in Persian 29 Nov 92 p 1

[Text] The Mojahedin-e Khalq Organization [MKO], an Iranian opposition group, disseminated a statement in Cologne that Iranian President 'Ali Akbar Hashemi-Rafsanjani visited a secret nuclear research center in Yazd Province on Saturday.

The official Iranian news agency, IRNA, had announced that Hashemi-Rafsanjani at d some accompanying ministers had inspected a desertification project to check on its progress.

The MKO added: Tehran radio reported that the deputy chief of the Iranian Atomic Energy Organization accompanied Hashemi-Rafsanjani during this visit.

The MKO stated: The Islamic Revolution Guards Corps administer one of the largest secret nuclear research centers in the country, located underground near Yazd.

According to this report, the project was begun in 1990.

PAKISTAN

Thermal Power Station Agreement Signed With PRC

BK3011093692 Islamabad Radio Pakistan Network in Urdu 0200 GMT 30 Nov 92

[Text] Pakistan and China have signed an agreement on cooperation in the field of thermal power production in Pakistan. Pakistan Federal Minister of Production Islam Nabi and China's Minister of Machinery Guagyuan signed the agreement in Beijing. Under the agreement China will provide assistance to Pakistan in meeting its energy requirements. Both countries agreed to cooperate in setting up a thermal power station in Pakistan on the basis of joint investment and joint production.

The Chinese minister said that this is a significant agreement which reflects the development of cooperation in the fields of economic and technical progress

Exchange of Nuclear Technology Sought With PRC

93WP0034A Lahore NAWA-I-WAQT in Urdu 12 Nov 92 P 3

[Text] Lahore, News Report; Commerce Reporter: Sirtaj Aziz, federal minister of the Treasury, will leave for China on 16 November where he will discuss the important topics of increasing cooperation between Pakistan and China and exchanging nuclear technology; he will be accompanied by Mohammad Ishaq Dar, vice chairman of the Pakistan Investment Board and other officials. The federal minister of the Treasury will participate in the meeting of the joint economic committee in China where measures to promote bilateral trade between the two countries will be discussed as well as matters relating

to the visit to Pakistan of Chinese industrialists and businessmen. According to reports, during the meeting, various suggestions regarding an increased Chinese participation in the Chashma nuclear plant will be considered. In the meeting, Pakistan will push forward the ongoing negotiations regarding the acquisition of additional nuclear power plants of similar capacity.

Chinese Military Delegation Arrives for Visit

BK0612162892 Hong Kong AFP in English 1606 GMT 6 Dec 92

[Text] Islamabad, Dec 6 (AFP)—A five-member Chinese military delegation headed by Major General Yang Guo Ping arrived here Sunday, officials said.

During its 10-day stay in Pakistan the delegation will visit training institutions at Rawalpindi, Aboottabad, Peshawar and Lahore and discuss matters of mutual interest with senior Pakistan Army officers, they said.

The official Associated Press of Pakistan news agency said the visit would provide an "opportunity to further consolidate existing friendly relations between armies of two countries."

The visit follows a controversy surrounding the reported sale of M-11 Chinese missile to Pakistan allegedly capable of carrying nuclear warheads.

Zaki Discusses Arms Control With British Official

BK0412103692 Islamabad Radio Pakistan Network in Urdu 0200 GMT 4 Dec 92

[Text] Akram Zaki, the secretary general of foreign affairs, and the visiting assistant under secretary of state in the British Foreign Office met in Islamabad yesterday and discussed matters relating to arms control and international security in the post-cold war era. Akram Zaki reaffirmed Pakistan's policy of respect for international law and explained Islamabad's efforts to promote international peace and security. He stressed the need for a regional regime to control arms and the spread of nuclear weapons in South Asia—a regime that has proved effective in Europe. The foreign secretary general apprised the British assistant under secretary of state of Pakistan's nuclear policy and its efforts for nuclear nonproliferation in South Asia.

Foreign Office Denies Reports of 7 Nuclear Bombs

BK0312162492 Islamabad Radio Pakistan Network in English 1600 GMT 3 Dec 92

[Text] In Islamabad today, a Foreign Office spokesman categorically denied that Pakistan possessed seven atomic bombs, as alleged in the statements attributed to U.S. Senator Pressler. The spokesman added that the senator's remarks should be viewed against the backdrop of the increasing criticism of his amendment which has been recognized as a bad law since it is (?country)-specific and blatantly discriminatory.

Defense Minister Notes Denial

BK0712100192 Islamabad THE NATION in English 7 Dec 92 p 12

[Text] Karachi—Defence Minister Ghaus Ali Shah has said that US Congressman Pressler was in the wrong about Pakistan possessing seven atomic bombs.

He said that Pakistan has been endeavouring to assure the West, particularly the U.S., that its nuclear programme was for peaceful purposes as "we do not desire to possess or develop any weapon of mass destruction. "Pakistan is prepared to sign NPT [provided India does so and has proffered the five-nation proposal to keep South Asia a nuclear free zone, he asserted.

He was talking to THE NATION here on Sunday when he called on Mr Majid Nizaml.

Syed Ghaus Ali Shah said: "Our position on Nuclear Programme is very clear and the level of our achievement is only for peaceful purpose. To a question, the Defence Minister said there were cordial relations between the government and the Army. The Army is a national institution, which strongly believes that democracy is the best political system for the country, he added. To another question, he said there was no proposal whatsoever to accord the Army a constitutional role in the national polity. When he was asked whether there was any chance of dialogues between the government and Opposition, the Defence Minister responded thast "negotiating" is always the best solution of the political issues and added that the government has always said that street demonstrations would solve nothing rather weaken and hinder the democratic process. The only way to solve the political issues is to sit together and discuss things arnicably, he said. He said that the prime minister wrote a letter to opposition leader. Ms Benazir Bhutto but her reply was not positive and contained some unacceptable pre-conditions. He said the doors of the government are always open for the dialogue with the opposition.

To another question, Syed Ghoaus Ali Shah said that the PDA [Pakistan Democratic Alliance] long march had become the short march and was going to end very soon. When period of ongoing Army operation could be extended, the Defence Minister said this will be reviewed in January and the government will assess the "extent of success" of the operation and then decide. He, however. said that most of the decoits terrorists and other criminals have [robbers] been nabbed and now one can travel in the interior of Sindh freely. To another question the Defence Minister said very soon the ORMARA Naval Port would start functioning as we have done away with the formal procedure and are working on the practical aspects of the project. When he was asked to comment on a news-item VOA had relayed about Pakistan's acquisition of Chinese missiles. Syed Ghoaus Ali Shah said he

was in no position to challenge the report, but if all it was correct what harm Pakistan could do to anyone because India hd acquired more sophisticated atomic missiles and it was developing atomic missiles for the last few years. Pakistan has full right to defend its borders, he added.

To another question, the defence minister said, that the Shah Bandar incident case has been referred to the Court of Law and the government will accept the vertict of the court.

Former Military Chief of Staff on Nuclear Program BK0712104392 Islamabad THE NEWS in English 6 Dec 92 p 4

["Exclusive Interview" with General Mirza Aslam Beg, former chief of the Army Staff, by Ikram Ullah; "Former COAS refutes Benazir's plea of ignorance: Clarifies M-11 missiles cannot deliver nuclear warheads;" in Lahore—date not given]

[Excerpts] Lahore: Former Chief of Army Staff [COAS] Gen (Retd) Mirza Azlam Beg arrived in Lahore on Thursday, December 3, 1992, for what he described as a four-day respite from his hectic calendar.

The General said he badly needed rest to shake off fatigue from last week's five-day International Seminar on Asian Regional Cooperation, organised by FRIENDS [research foundation] at Rawalpindi.

Amidst a busy schedule of social calls, visitors, weddings and golf, he granted an exclusive 90-minute interview to 'THE NEWS' International, Lahore, dealing mostly with currents and cross currents of the controversy surrounding Pakistan's nuclear programms.

In a forthright manner, the former COAS addressed the channels of control over Kahuta, an issue so sensitive that the politicians dread to tread the very territory.

Commenting about PPP [Pakistan People's Party] chairperson Nusrat Bnutto's latest statement and former Prime Minister Benazir Bhutto's [BB] observation that she had learnt the details about Pakistan's nuclear capability at Washington in a briefing given her by director of the CIA, Beg said the actual position, as far as he knew in his capacity as Chief of Army Staff during BB's term as Prime Minister was different. He did not mince words with regard to the recent US stance on the issue and the motives behind the on going propaganda by the Western media.

Commenting upon the LOS ANGELES TIMES' report about Chinese supply of M-11 Missiles to Pakistan, Gen Beg refuted the allegation that the missiles could deliver nuclear warheads. [passage omitted]

Q: I am sure Benazir Bhutto's recent statement regarding her ignorance about up-to-date information with regard to Pakistan's nuclear programme has not escaped your notice. She has referred to a briefing at Washington by Director CIA and former US ambassador Oakley about our nuclear programme crossing the red line. Accordingly, Pakistan is alleged to have come close to a nuclear holocaust some time around May, 1990. It has been alleged that this happened without the knowledge of the then prime minister. Would you like to comment? You were the COAS at that time.

Beg: I am not surprised to hear a statement of this kind from the then Viceroy of Pakistan - Lord Oakley. It has sinister motion behind it - specially accusing Pakistan of having crossed the red-light [as published] i.e. assembling a nuclear warhead and developing the means for delivery. It was an obvious excuse for applying sanctions against Pakistan and freezing military assistance. The fact of the matter is that Ambassador Oakley or the CIA knew that no such thing had actually happened.

Secondly, to say that because of confrontation between India and Pakistan, Pakistan was ready to use its nuclear device against India, was meant to convey to the world that Pakistan was such an irresponsible country, that having acquired such capability, it was ready to strike an apprehension about Pakistan and other such countries (that if they possess such a capability) which had always been talked about traditionally. It is a well known fact that use of such a weapon of terror and destruction. becomes thinkable only under very specific obtaining conditions, such as strike against Hiroshima and Nagasaki, without fear of retaliation and perhaps to bring about surrender of enemy forces to save on causalties if the war had prolonged. The situation between Pakistan and India is entirely different. There is a solid fear of massive retaliation from India as they have a stockpile of more than four dozen nuclear warheads.

Besides there was no critical or desperate situation at the time which could justified [as published] an extreme action.

Thirdly, the aim of dispensing such disinformation was to create a misunderstanding between the Army and the government of the day. Although the government at that time had engaged the services of Ambassador at large Happy Minwala, who was negotiating the nuclear issue with the government of USA. Thus, the ambassador could not have done unless he had been briefed on the nuclear programme and the capability by the Government of Pakistan. Besides Happy Minwala there was Gen. Imtiaz Ali, Adviser to the Prime Minister on defence who was also the chief negotiator on this issue and held various meetings at Washington and Islamabad with concerned US officials and diplomats in this capacity. All the activity by Happy Minwala and Gen. Imtiaz, could not have taken place behind the back of the then prime minister, keeping her in the dark as is alleged to have been claimed by her now.

Q: In the back-drop of your above observations, the basic issue still remains shrouded in mystery as to who controls the nuclear programme in Pakistan—the army

or the president? It is generally believe and Ziaul Haq controlled the activity as long as he lived and the prime minister had not been initiated into the picture by Ziaul Haq. Mohammad Khan Junejo is reported to have paid a visit to Kahuta but is believed not to have been taken into full confidence by the authority in charge. As for Benazir Bhu io, she never paid a single visit to the sensitive installation nor had any control over Dr Abdul Qadir Khan's projects. How much control did you exercise over the nuclear programme as Chief of Army Staff?

Since your retirement in August 1991, it is believed that it is the president and the present chief of Army Staff who are actually (collectively) in charge of the programme. It is commmonly believed that even Prime Minister Nawaz Sharif has very little policy control over the nuclear programme because of which, on this issue, the American deal directly with the president and COAS.

Beg: There is no mystery about this issue, because the hand that feeds the mouth controls the reins. A programme of this dimension, if not funded by the government, which is headed by the chief executive i.e. the prime minister will dry up in no time. The president or the COAS do not have at their disposal a programme of this dimension. Of course the president and the Army chief do play a role which is only of an advisory nature.

Q: Do I take if from your observation that the prime minister of Pakistan exercises full control over the country's nuclear programme in all its forms and the general misgivings and apprehensions in this regard are totally unfounded?

Beg: Undoubtedly yes.

Q: It has been reported in the local press today, as well as foreign media like BBC and CNN that China has recently provided missiles to Pakistan which can deliver nuclear weapons. A local paper has quoted a report from LOS ANGELES TIMES that two dozen M-11 Missiles were disembarked at Karachi port during the past two weeks. Would you like to comment upon this?

Beg: This, again, is a part of the sinister design to malign Pakistan on the nuclear issue and create doubts in the minds of the people at a time when Prime Minister Nawaz Sharif is shortly due to visit Japan. The Japanese are, naturally, very sensitive about nuclear poliferation because of the holocaust they suffered at Hiroshima and Nagasaki.

As regards the M-11 missile system that Pakistan is acquiring from China, it is covered within the six-nation agreement on Missile Technology Control to which China is a signatory. The missile has a range of less than 300 kms and is not capable of carrying a nuclear warhead. It is neither designed for it, nor has the required degree of accuracy.

Ikram Ullah: Thank you General Saheb

Beg: Thank you Ikran.

Editorial on Bhutto Announcement on Nuclear Plans BK0612103592 Peshawar THE FRONTIER POST in English 6 Dec 92 p 10

[Editorial: "Ms Bhutto's nuclear fallout"]

[Text] Predictably, Ms Bhutto is getting flak for saying what she did to NBC about Pakistan's nuclear programme. She had said she didn't know that Pakistan had 'crossed' the threshold earlier 'agreed' by the 'troika' [the government establishment, the military, and the president] in Islamabad with Washington. Quondam [former] COAS [Chief of Army Staff] General Mirza Aslam Beg presumably gave the go-ahead to Kahuta in 1989 for crossing the threshold without taking the elected leadership into confidence. This has been said earlier, too, and has not been a secret that Ms Bhutto is now guilty of revealing to an American TV network. Presumably, the president was in on it; the PM [Prime Minister] was not considered worthy of being made privy to the secret. If General Beg was the big 'strategist' in the national army, it has not paid off. People don't even remember the 'defiance' maunderings he was given to when he was in charge. He refused to discuss the defence budget with the civilian government and thought Kahuta was his monopoly. Nothing that he did has stood up to the test of circumstance, including his great Saddam blunder. This year Pakistan has 'frozen' its nuclear programme at Kahuta at the 1989 level. This clearly means that whatever the COAS and the president did after 1989 has been 'rolled back'. Who has 'betrayed' Pakistan's honour?

There are really no secrets. It is wrong on the part of politicians to bash each other on an issue that is not within their grasp. Over the years, public opinion has accepted the fact that the elected government should stay out of the process of decision-making related to our nuclear programme. Political leaders have accepted that while they suffer the punishment for what is happening inside Kahuta, they would go on nurturing the misinformed public opinion against their own right to be in control. Throughout the 7th Five-Year Plan (1983-88). no nuclear or hydel [hydroelectric] addition could be made to the national power grid because nuclear power was embargoed and the Kalabagh Dam couldn't he built because of inter-provincial politics. Ten years later, Pakistan is 2000 MW short of electricity and is subject to loadshedding. The thermal power it has acquired over this period is eating up 30 percent of its oil bill; and if the oil prices go up, its electricity costs will make every export commodity non-competitive. The Karachi nuclear plant is running only 40 percent of the time it should, produces 80 MW instead of the installed capacity of 137 MW and supplies one-twentieth of the electricity that Karachi needs. Arms embargo is hurting the army equally. One reason the nuclear 'freeze' has been accepted by the troika in Islamabad is this erosion of the conventional defence. The lesson to be learnt from Ms Bhutto's 'betrayal' on NBC is that Mian Nawaz Sharif should be in charge of the nuclear programme as the elected leader of the country, the defence budget

should be tabled in the National Assembly, and Pakistan should embark on a new diplomacy to minimise the effect of the punishment it is enduring because of a policy handled outside the civilian government. If things have changed since Ms Bhutto, then one can understand

the deal the government has made with France over the Chashma nuclear plant and the 'freeze' it has agreed with Washington. Meanwhile, politicians can bash each other freely over something that people don't know much about.

CIS Smuggling of Radioactive Goods Increasing

PM0412090592 Moscow NOVOYE VREMYA in Russian No. 48, Nov 92 (Signed to Press 24 Nov) pp 16-17

[Article by correspondent Rudolf Boretskiy under the "Poland" rubric: "Traders in Invisible Death"]

[Text] Warsaw—A new commodity has appeared on Europe's black market: Radioactive substances from the CIS.

Surprises from the collapsed Soviet empire are constantly energizing the prosperously somnolent West: They shuddered in expectation of a wave of refugees, they were astounded by the scale of weapons smuggling and car hijacking, they were amazed by the commercial talents of our military, and their hearts sank in terror on hearing of the insidiousness of the "Russian mafia." A "Russian" bazaar (which is predominantly Belarusian, Lithuanian, and Ukrainian, but which for some reason has the reputation of being "Russian") has become a stable background for strong emotions, a constant amazement factor, so to speak.

The technology and mechanism whereby the bulk of goods filter abroad is simple and has been tested to the point of dependability: A customs officer is also a tax collector; having received a payment he gives the green light. Then the sharp peddlers from the CIS pour across the Polish plain. Or even further, across the Oder. There is no counting the number of "Russian" bazaars and traders. They have really become a pan-European phenomenon targeted at the poorest sections of the population: Which is also one of the patterns of the free market, where, as we know, every commodity finds a buyer.

Here is the latest news: Uranium, cesium, and cobalt capsules have appeared on the black market.... The first signal—following alarming rumors which seemed to be unlikely speculations—came 17 October from Brest Oblast Prosecutor's Office. A group of smugglers—eight CIS citizens and three Poles—were arrested in Brest's Inturist Hotel. They were all involved in "radioactive business." As is customary, in the interests of the investigation the Prosecutor's Office is saying nothing beyond the most general details. It is clear that the detainees are just the agents, the couriers. Not a word has been said about the main thing—the source from which they are getting it and the destination where the goods are to be sold. But some details have leaked out nonetheless and become the property of the journalists. Thus one of the Poles, an inhabitant of Terespol near the border, acted as a "shuttle"—a carrier of radioactive substances on Polish territory. His clients (nobody knows who they are at the moment) were presumably interested in the goods alone; the smugglers and gangsters were in it just for the money. The fact that this operation was fatally dangerous to people around them did not worry either the clients or the smugglers. Andrzej, the Terespol "shuttle,"

kept the "goods" wrapped in a polythene bag in the bathroom of his house, right next to members of his family.

Containers holding the dread substance marked "Made in USSR" are already being found beyond Poland's borders as well. A disturbing television report about searches made by special subunits in Frankfurt am Main was broadcast recently. Dozens of policemen, dosimetrists, and trained dogs tried to trace and fish out radioactive materials at a deserted station. The meter reading went off the scale in the cloakroom: They discovered a large container hidden in one of the identical luggage lockers which was emitting strong radiation. The owner had disappeared, of course. But the container bore the "Soviet" marking.

So the market mechanism of supply and demand has given birth to a menacing phenomenon. There are two main problems here: Where is it going, who needs this radioactive torrent from the East, and where is its source?

Clearly, these goods are not needed here in Poland. They would simply not find a consumer. The territory between the Bug and the Oder is "neither west of the East or east of the West," as a Polish journalist has wittily christened it—it is merely a transit area, a preliminary storage facility for dangerous substances. Here consignments are made up for subsequent transfer to major foreign clients. mainly, it is thought, in Near East countries, and in addition market prices are fixed here in freely convertible currency. Thus the Brest-Terespol gang, as the investigation revealed, was seeking to make contact with consumers and hoping to earn \$200,000 from the sale of the goods hidden in the bath. Prices for exotic substances and isotopes are high. Admittedly the free market reacts sensitively to the amount of goods in circulation coming from CIS countries. Just a few years ago a kilogram of red mercury would fetch about 1 million German marks. Now that the border has become more transparent and the customs officers more obliging, its price has fallen almost tenfold, but the smugglers are content even with 100,000.

Meanwhile the mood of panic is growing. Not just in Poland. The Poles have already equipped three border crossing points—Olszyna, Swiecko, and Zgorzelec—with special "gates" that detect radiation. It is planned to equip the remaining two dozen crossings with this apparatus. But the Polish border services and customs realize that this struggle against "radioactive contraband" cannot be absolutely successful: The "green border" [unpatrolled areas not recognized as official crossing points] extending over 1,000 km which separates the country from the territory of the former USSR cannot be sealed with impassible "gates."

Prosecutor Szkodzinski, who is leading the investigation into the case of the group of smugglers from the CIS and Poland, told journalists: "Everything the market demands comes from the East. I would not be surprised

if one fine day I had to conduct a case concerning smuggled nuclear warheads."

It is believed here that the contraband could come from three sources: These are, first, from the armed forces of the countries that used to comprise the USSR; second, from nuclear electric power stations; and finally, directly from producers. These three sources, these three suppliers of a type of contraband which poses a threat to the entire world should be brought under the strictest state control within CIS countries.

Russian Opposition Cites Nuclear Accord With U.S.

LD0312181392 Moscow ITAR-TASS in English 1604 GMT 3 Dec 92

[By ITAR-TASS parliamentary correspondents Lyudmila Yermakova and Yuriy Khots]

[Text] Moscow December 3 ITAR-TASS—The Rossiyskoye Yedinstvo (Russian Unity) opposition bloc continues to insist that the agreement between Russia and the United States on safe and reliable transportation, storing and elimination of weapons and prevention of their proliferation is tantamount to selling off Russia's interests. This was reiterated at a news conference held by the bloc here today.

On Wednesday the Russian Government Press Centre said in a statement that the agreement signed by the presidents of the two countries did not transcend the confines of conventional international practice and contained no obligations tipping the scales in the United States favour. The agreement envisages that the United States will provide free assistance to Russia in eliminating nuclear and chemical weapons. Russia will in turn provide conditions for the United States which would create a favorable climate for this assistance.

Bloc representative Mikhail Astafiyev said the explanation offered by the government press centre held no water.

Russia, Japan Cooperate on Nuclear Power Station

MK3011102592 Moscow KOMMERSANT-DAILY in Russian 28 Nov 92 p 3

[Unattributed report under the general heading: "Comings and Goings"]

[Text] Vitaliy Konovalov, Russian first deputy minister of atomic energy, has returned to Moscow from Japan. He had been taking part in the Russo-Japanese consultations on nuclear power issues in Tokyo. In an interview with KOMMERSANT-DAILY's correspondent Mr. Konovalov stated that Russia intends to obtain its share of the Japanese ordinary uranium market. He noted that, although the question of ordinary uranium exports to Japan was not really discussed at the consultations, the Russian side's intentions are no secret to the Japanese. According to the deputy minister, the consultations

elaborated technical issues relating to the modernization of the Novovoronezhskaya nuclear electric power station with the help of a Japanese center for the training of nuclear power station service personnel, and covered shipments of reactor diagnostic equipment to Russia. The Japanese intend to spend around \$25 million on the two programs. Japan is also prepared to receive and pay for the training of several dozen Russian AES specialists every year.

Russia Reports Cessation of CW Production

PM0812115992 Moscow IZVESTIYA in Russian 3 Dec 92 Morning Edition p I—FOR OFFICIAL USE ONLY

[Unattributed trailer to article by Doctor of Chemical Sciences Lev Fedorov "The Myths and Legends of Chemical Disarmament": "The Myths and Legends of Chemical Disarmament"]

[Text] Recently the serene flow of official reports on the cessation of chemical weapons production in Russia and on their phased destruction has been disturbed. Apart from the comforting view on the problem which Academician Anatoliy Kuntsevich, chairman of the Committee on Convention Problems of Chemical and Biological Weapons, and other officials and representatives of the military-chemical complex have expressed on more than one occasion in the press (including our newspaper), other opinions have been published, too. The academic chemists Vil Mirzayanov and Lev Fedorov have expressed the most pointed views.

The first of them worked at one time as chief of the department to counteract technical espionage at one secret scientific research institute, visited practically all the military-chemical complex's facilities, and gave a written undertaking not to disclose the secrets known to him from his work work—secrets which were connected with the production of military toxic chemical agents. These secrets—even the effect on our own people of the chemical agents being produced—constitute major state secrets.

V. Mirzayanov is now under investigation and a criminal case is in progress on his disclosure of these very secrets, these state secrets. His colleague L. Fedorov is acting as a witness in the case. Nevertheless, the scientist has offered a manuscript to IZVESTIYA which summarizes his observations over many years of the military chemical complex's secrets. Therefore, the first question to the author is: Is he not afraid of ending up himself in the role of the accused?

"Technically speaking, I was not given access to the secret work although I am in possession of fairly 'explosive' information. What is more, I received an offer from the Supreme Soviet to present my conclusion on the draft of the comprehensive program on the phased destruction of chemical weapons in the Russian Federation. I do not think that under these circumstances the

state security service will not try to do me ill. But I am obliged to speak about the myths of chemical disarmament—this is my duty as a scientist and as a citizen of Russia."

What alarms L. Fedorov concerns first and foremost you and me, our children's safety. While there is even the smallest threat from the military-chemical complex, we have an obligation to sound the alarm. After all, to this day we do not know the whole truth about the military-chemical complex's output.

We do not know what's "cooking" in our secret scientific research institutes' and secret plants' flasks. We do not know where the fatal poisons are being stored and how they are being destroyed. We do not know about accidents at chemical plants. The least attempts to answer these questions may for the "curious" person turn into criminal liability.

One would like to hope that the dozens of generals and thousands of workers of the military-chemical complex are doing everything possible to make us safe (as well as themselves!) from the threat of mass destruction. But it is only religion which relies on faith alone. In real life we need correct and timely information.

Read Lev Fedorov's article "The Myths and Legends of Chemical Disarmament" on page 3.

Russian Nuclear Scientist Downplays 'Brain Drain'

PM2411102392 Moscow ROSSIYSKAYA GAZETA in Russian 21 Nov 92 First Edition p 4

[Vladimir Gubarev "transcript" of statement by Stanislav Voronin, chief designer of Russia's nuclear and hydrogen weapons, under the "Debate" rubric; place and date of statement not given: "Fewer Illusions!"]

[Text] [Voronin] I vote with both hands for the "brain drain," but it is preferable that the brains be "young, talented, and original." The more of these "brains" that "drain" from Moscow State University, the universities of large cities, and prestigious higher educational institutions in our direction, for example, to the Russian Federal Nuclear Center, the better it will be both for our science and for world science. Unfortunately, the influx of young people to Arzamas-16 is very small now, and this cannot fail to cause concern, since we are talking of Russia's future. But it is impossible to imagine it without science and modern technology.

If we speak of the flight of scientists to the West, of the fact that soon we will supposedly have no intellectuals left and they will all end up in European and U.S. scientific laboratories, does it not seem to you that we are trying once again to end up in thrall to stereotypes? There are many facets to the problem of the "brain drain." I will speak at once of weapons: There has not yet been a single instance where any "bomb maker" has ended up in the West and worked there on our themes.

No, thank God, specialists now go abroad on official business trips, meet with colleagues there, and discuss urgent problems. This is natural. The "brain drain" is sometimes understood as the divulgence of state secrets. But this has to do not with science but with quite a different sphere—you know which one.

Now another facet. Do not think that there are that many specialists who have thorough knowledge of just how to build a particular weapon—they are very few in number. Note, therefore, that it is precisely those who have nothing to do with nuclear weapons and, moreover, who have never even seen them that like to talk about them. In my view, they are simply enhancing their reputation in the West....

One more thing. It is a veritable catastrophe for a real scientist when he leaves the environment in which he developed his talent. Most frequently his creative potential drops sharply. Such examples are well known even with geniuses, not to mention simply talented people....

In my younger years I was fortunate to have quite frequent contacts with Andrey Dmitriyevich Sakharov. Here he had many friends, supporters, and like-minded people. But there, on the "mainland," he remained alone. I bow down before his courage, but nevertheless I am profoundly convinced that he could have been of greater benefit here. Not only in our work. The nutrient medium in which Sakharov's genius flowered and shone in full measure was here. At first it was hard for us without him—it is this kind of "brain drain" that is simply catastrophic for any scientific center.

In general, it sometimes seems to me that behind the fine-sounding and effective campaign, particularly connected with the problem of the so-called "brain drain," there lies an attempt to discredit Russia's science and scientists—precisely those who under the very difficult present conditions are creating, improving, and dismantling modern nuclear and thermonuclear weapons. Our work requires calm, reliability, amicability, and confidence in our future and that of our children. Whatever people say about nuclear specialists, it should never be forgotten that the security of nuclear weapons and, thus, also of the planet is in their hands....

Russian Reports of Nuclear Sales 'Unconfirmed'

PM0412170992 Moscow KOMSOMOLSKAYA PRAVDA in Russian 26 Nov 92 p 3

[Report by M. Chiken: "On These Blackest of Blacklists"]

[Text] A session of the CoCom [Coordinating Committee for Export Controls] Cooperation Forum in which representatives of new states from the former USSR took part has ended in Paris. The fact that we participated in the work of an organization originally created to prevent supermodern technology from finding its way into our laboratories is a real sensation. At the forum the conclusion was reached that there is no longer

any political reason for CoCom's existence in its previous form, and because of that the organization must be substantially modified.

This means that the discriminatory restrictions in the sphere of economic cooperation and trade which existed in the cold war years will now be reviewed.

Nevertheless, all this does not mean that the CoCom "black" lists no longer exist. Moreover, Russia has them, too. This is necessary to prevent the proliferation of nuclear weapons or, to be more precise, components for their manufacture. In order to control the sale of strategically important raw materials, criminal legislation will be applied to transgressors. A special Export Control Commission headed by Vice Premier Georgiy Khizha has been created by an edict of the Russian president.

The procedure for export transactions is defined by the Russian Government. Furthermore, the rules for the sale and purchase of strategic materials apply to enterprises under all types of ownership. This should convince the West that the average private businessman cannot trade in uranium of unknown origin or destination. The "prize" for smuggling is now from five to 12 years.

From now on an exporter is obliged to demand an explanation from an importer as to why material of one sort or another is being purchased. The purchaser undertakes not to re-export or use it for explosions. The most important thing is that the importer must obtain a guarantee from the appropriate state organ of the country on whose territory he is located. That is, the state intercedes for the firm.

In general, Deputy Foreign Minister G. Berdennikov gave his assurance that the information periodically appearing in the West about the sale in Russia of nuclear components and their subsequent resale is unconfirmed.

When the Russian Foreign Ministry requests its Western colleagues to provide specific facts, it turns out that there is nothing of the kind.

Russian Leader Issues Directive on Pathogen Exports PM0712133592 Moscow ROSSIYSKIYE VESTI in Russian 5 Dec 92 p 3

[Directive of the President of the Russian Federation no. 711-rp dated 17 November 1992]

[Text] Directive of the President of the Russian Federation

On the introduction of Controls on the Export from the Russian Federation of Pathogens. Their Genetic Variations, and Fragments of Genetic Material, Which Could Be Used in the Creation of Bacteriological (Biological) and Toxic Weapons

- 1. The list submitted by the Russian President of pathogens, their genetic variations, and fragments of genetic material which could be used to create bacteriological (biological) and toxic weapons which are exported under licence (the list is appended) is approved.
- 2. The Russian Federation Government shall approve the Statute on the procedure for controling the export from the Russian Federation of pathogens, their genetic variations, and fragments of genetic material which could be used in the creation of bacteriological (biological) and toxic weapons.

[Signed] B. Yeltsin, president of the Russian Federation. President's Directive no. 711, dated 17 November 1992.

List of Pathogens. Their Genetic Variations, and Fragments of Genetic Material Which May Be Used In the Creation of Bacteriological (Biological) and Toxic Weapons Exported Under Licence Approved by Directive of the President of the Russian Federation no. 711 dated 17 November 1992

	Table 1						
Number of position	Name	Foreign economic activity commodity code number					
1.	Viruses, their genetic variations, and fragments of genetic material						
1.1	Strains of pathogen of dengue fever serotype I-IV	300290500					
1.2	Japanese encephalitis pathogen	300290500					
1.3	Pathogen of primaveral-estival mite encephalitis	300290500					
1.4	Pathogen of St.Louis encephalitis	300290500					
1.5	Pathogen of Eastern American Equine Encephalomyeitis	300290500					
1.6	Pathogen of Venezuelan Equine Encephalomyelitis	300290500					
1.7	Pathogen of Western American Equine Encephalomyelitis	300290500					
1.8	Rift Valley Fever Pathogen	300290500					
1.9	Smallpox pathogen	300290500					
1.10	Yellow Fever Pathogen	300290500					
1.11	Hemorrhagic Fever Pathogen:						
1.11.1	Hemorrhagic Fever with Renal Syndrome	300290500					
i.11.2	Congo-Crimea Hemorrhagic Fever	300290500					

Number of position	Table 1 (Continued)	Familian accomplisation with the second
1.11.3	Name	Foreign economic activity commodity code number
1.11.4	Omsk Hemorrhagic Fever	300290500 300290500
1.11.5	Hemorrhagic Lassa Fever Hemorrhagic Ebola (as transliterated) Fever	
.11.6		300290500
1.11.7	Marburg [as transliterated] Fever	300290500
.11.8	Argentine Hemorrhagic Fever (Junin) Bolivian Hemorrhagic Fever (Machupo)	300290500 300290500
1.11.9	Chikungun [as transliterated] Fever	300290500
.12	Pathogen of lymphocytic choriomeningitis	300290500
.13	Monkey Pox Pathoger.	300290500
.14	White Pox Pathogen	300290500
.15	Pathogen of Kyasanurskaya [as transliterated] Forest Disease	300290500
.16	Rabies pathogen	300290500
.17	Pathogen of Scottish Encephalomyelitis	300290500
.18	Pathogen of Murray Valley Encephalitis	300290500
.19	Pathogen of Rosio [as transliterated] Encephalitis	300290500
.20	Oropush [as transliterated] Pathogen	300290500
.21	Povassan [as transliterated] Pathogen	300290500
	Rickettsia, genetic variations, and fra	
.1	Q Fever Pathogen	300290500
.2	Trench Fever Pathogen	300290500
	Bacteria, genetic variations, and fra	
.1	Anthrax Pathogen	300290500
.2	Brucellosis Pathogen	300290500
.2.1	Brucella melitensis	300290500
.2.2	Brucella suis	300290500
.2.3	Brucella abortus	300290500
.3	Cholera Pathogen	300290500
.4	Pathogen of dysentery (Shigella)	300290500
.5	Pathogen of glanders	300290500
.6	Pathogen of pulmonarymelioidosis	300290500
.7	Plague pathogen	300290500
3.8 Pathogen of tularemia		300290500
Pathogen of typhus abdominalis		300290500
.10	Ornithosis pathogen	300290500
.11	Botulism pathogen	300290500
12	Gas Gangrene pathogen	300290500
.13	Tetanus pathogen	300290500
.14	Pathogen of legionnaire's disease	300290500
	Genetically altered microorganisms producing the following toxins (1)	300290500
.1	Toxin botulinus	
.2	Gas Gangrene Toxin	
.3	Toxins of Staphylococcus aureus	
.4	Ricin	
.5	Saksitoksin [as transliterated]	

FRD 8 8	10	
Table	((on	finued)

Number of position	Name	Foreign economic activity commodity code number			
4.6	Dysentery toxin				
4.7	Konotoksin [as transliterated]				
4.8	Tetrodotoksin [as transliterated]				
4.9	Verotoksin [as transliterated]				
4.10	Abrin				
4.11	Cholera toxin				
4.12	Tetanus toxin				
4.13	Trikhotsenovyye [as transliterated] mycotoxins				

(Note 1) The list does not constitute a basis for the control of the toxins themselves.

Russia Approves Pathogen Export Control Statute

PM0712155992 Moscow ROSSIYSKIYE VESTI in Russian 5 Dec 92 p 3

[Decree no. 982 of the Government of the Russian Federation dated Moscow, 20 November 1992]

[Text] On the ratification of the Statute on the Procedure for Controling the Export from the Russian Federation of Pathogens, Their Genetic Variations, and Fragments of Genetic Materials which Could Be Used in the Creation of Bacteriological (Biological) and Toxic Weapons

In accordance with the directive no. 711-rp of the president of the Russian Federation dated 17 November 1992 "On the introduction of Controls on the Export from the Russian Federation of Pathogens, Their Genetic Variations, and Fragments of Genetic Material, Which Could Be Used in the Creation of Bacteriological (Biological) and Toxic Weapons," the Government of the Russian Federation decrees:

- 1. To approve the attached Statute on the Procedure for Controling the Export from the Russian Federation of Pathogens, Their Genetic Variations, and Fragments of Genetic Materials which Could Be Used in the Creation of Bacteriological (Biological) and Toxic Weapons.
- 2. The Russian Federation Commission on Export Control under the Russian Federation Government together with the Russian Federation Ministry of Foreign Economic Relations and the Russian Federation State Customs Committee shall ensure the organization of the control of the export of pathogens, their genetic variations, and fragments of genetic material which could be used in the creation of bacteriological (biological) and toxic weapons.

[Signed] Ye. Gaydar

Russian To Expand Market for Armament Sales

OW0412161592 Moscow INTERFAX in English 1500 GMT 04 Dec 92

[Transmitted via KYODO]

[Text] Russian Minister of Foreign Economic Relations Petr Aven said in an interview that Russia intends to broaden the market for the sale of its armaments and military technology. He evaluates Russian arms export activity "very positively," especially in the Far East region, with customers such as China and South Korea. He said that Russia had "effectively reached" an agreement with Malaysia for the sale of up to 30 MiG-29 fighter aircraft and was now working on deliveries of modern armaments to South Korea, which has also expressed an interest in purchasing arms from Russia.

INTERFAX has learned from reliable sources in the Russian Ministry of Defense that deliveries of various weapons to South Korea are being discussed; in particular, Grad multiple rocket launcher-type systems, fixed antiaircraft systems such as the C-300M, Su-25 ground attack aircraft, and Su-27 interceptor aircraft.

Aven added that Iran is also an important market for Russian weaponry. He reported that Russia had already sold Iran three diesel submarines at more than \$400 million apiece, and intended to strengthen this market "regardless of the opposition of American competitors."

Aven further reported that Russia was carrying on negotiations with the United Arab Emirates to supply the country's army with Russian firearms and equipment. According to INTERFAX's information, the UAE may buy several C-300 antiaircraft installations, rocket launchers, and small patrol boats from Russia.

Russian Navy Denies 'Ballistic Missile' Reports

PM0212155792 Moscow KRASNAYA ZVEZDA in Russian 1 Dec 92 p 2

[Unattributed report: "Report On New Ballistic Missiles Greatly Exaggerated"]

[Text] The report published in a number of media organs to the effect that the Pacific Fleet has successfully assimilated some new ballistic missiles is untrue, the Navy commander in chief's press group has announced. The Pacific Fleet has received no new types of ballistic missiles, except for the strategic missiles that are already on the submarines.

In fact, in September the guided missile cruiser Chervona Ukraina and two nuclear submarines, in accordance with the combat training plan, jointly fired at a marine target using antiship missiles which they had had in their armament for a long time.

Russian Scientists To Work at New S&T Center

PM0312114792 Moscow ROSSIYSKIYE VESTI in Russian 28 Nov 92 p 1

[Report by Pavel Shinkarenko: "Military-Industrial Complex Cadres. Work Will Be Found for Them in Russia Too"]

[Text] Russian nuclear scientists will get this opportunity in the International Scientific-Technical Center [ISTC] that is being set up in Moscow. An agreement on this was signed yesterday by Russian Federation Foreign Minister Andrey Kozyrev together with representatives of the other founders—the United States, Japan, and the EC.

"The international center will provide scientists from Russia and other CIS countries, and Georgia too, in particular those who possess knowledge and skills in the sphere of mass destruction weapons and missile delivery systems, with the opportunity to apply their talents to peaceful activities," Russian Federation Deputy Foreign Minister Grigoriy Berdennikov told me.

Grigoriy Vitalyevich stressed that the United States is providing \$25 million, Japan \$17 million, and the EC 20 million ECU's to support the ISTC and its activities and projects. At its own expense, the Russian Federation will provide the center with suitable official premises (provisionally, in the Tsaritsyno park area) and will also provide maintenance, services, and security.

"Before parliamentary ratification of the agreements," the deputy minister continued, "we have agreed to set up a preparatory committee which will start studying the administrative, financial, and cadre questions literally in the next few days. So the center itself will not have to waste valuable time bothering with all these things: It will start dealing with scientific problems immediately."

"We intend," Aleksandr Pavlov, deputy chairman of the Russian Federation Atomic Energy Ministry International Relations Committee, added, "to recruit for this work nuclear scientists who deal with nuclear weapon problems. Primarily from the well-knwon institutes and laboratories in Arzamas-16, Chelyabinsk-70, and the like. By means of their research they will give considerable support to the CIS countries and Georgia in the transition to a market economy that meets civilian needs. It will include projects in the spheres of environmental protection, energy production, and safety in the nuclear energy industry."

It is hoped that the ISTC will soon get some new cofounders. For example, Sweden, Switzerland, and

Canada have expressed a wish to work in the collective. There have been similar noises from other countries as well

Russian Atomic Energy Minister To Head Nuclear Center

LD0512060792 Moscow Radio Rossii Network in Russian 0400 GMT 5 Dec 92

[Text] Russian Atomic Energy Minister Viktor Mikhaylov has been appointed scientific head of the Russian Nuclear Center. He replaces Academician Yuliy Khariton who has been scientific head of Arzamas-16, Russia's Federal Nuclear Center, up to now. POST-FACTUM attributes this appointment to the fact that the Russian Ministry for Atomic Energy may soon be disbanded, while the Federal Nuclear Center at Arzamas-16 could come under the direct control of Russia's Security Council. Mikhaylov is expected to combine the duties of minister with those of scientific director of the Nuclear Center, the newspaper NIZHEGORODSKIYE NOVOSTI reports.

Russia To Grant Credits to Nuclear Power Stations

OW0712210492 Moscow INTERFAX in English 1933 GMT 7 Dec 92

[Transmitted via KYODO]

[Text] Russia is ready to build a nuclear power station with an output of 2,000 kilowatts in China. During his visit to Beijing from December 17-19, the Russian President plans to sign an agreement granting China \$2 billion in credit for a period of no more than 15 years at an interest of 4%.

In an interview with INTERFAX, the Russian Foreign Economic Relations Ministry department chief, Viktor Koptevskiy, said that the step would promote the export of machines and equipment. "Russia has no markets other than the Asian-Pacific region where its products would be competitive enough, and such contracts keep Russian machine-building industries going and maintain the import of essentials," the ministry official pointed out

Koptevskiy said that the possibility of granting similar credits for the construction of nuclear power stations in India (the same as in China), Iran and Pakistan (each with capacity of 1 megawatts) was being considered.

Urkaine Leader Says 'Not Currently a Nuclear State' OW0412131592 Moscow INTERFAX in English 1242 GMT 04 Dec 92

[Transmitted via KYODO]

[Text] Ukrainian President Leonid Kravchuk said at a Thursday conference at the Ministry of Defense that to raise the question of Ukraine's transformation into a nuclear power is absurd from the political and technical points of view, among others.

The president emphasized that Ukraine is not currently a nuclear state, although it has strategic nuclear arms. Kravchuk called for the republic's army to be equipped with conventional arms and state-of-the-art technology.

Ukraine Leader Addresses Army on Nuclear Issues

LD0312224492 Kiev Ukrayinske Telebachennya Television Network in Ukrainian 1900 GMT 3 Dec 92

[Excerpts] A military conference on the results of the year's combat training of the Ukrainian Army took place at the Ministry of Defense of Ukraine today. [passage omitted]

[Presidenta] Leonid Kravchuk addressed participants in the conference. Having characterized Ukraine's military doctrine, he expounded the position of the state on main issues of putting it into practice. In particular, he touched the concept of nuclear disarmament.

[Begin Kravchuk recording] The world is watching our actions and our policy in this field, with alarm, I stress. The question is whether to declare ourselves a nuclear state. Today we are not a nuclear state. There are strategic nuclear forces on our soil, the launch of which I, as president, am able to block today. But I never have been reaching out for, and am not reaching out for, the button to launch them. To block the launch, and that is it.

So, to declare ourselves a nuclear state is to take on everything—all responsibility, production, maintenance, and so on. Can we do it? I think we can not. Generally, today this issue is absurd for our state, simply absurd, both from a political standpoint, and a military one, and a technological one, and other standpoints.

I think we have another path. This is to create such armed forces that are capable of applying force to our potential adversary; and they have to have conventional weapons, as well as the capability of creating weapons based on the most advanced technologies. [end recording]

Ukraine's Plushch Sets Conditions for N-Arms

LD2711205992 Moscow Teleradiokompaniya Ostankino Television First Program Network in Russian 1800 GMT 27 Nov 92

[From the "Novosti" newscast]

[Text] [Announcer Vykhukholev] One of the main points on the agenda of the jubilee session of the CIS heads of state in December will be the issue of which state owns the strategic nuclear weapons on the territory of the former Union republics. Belarus, Kazakhstan, and Ukraine have announced their intention to become nuclear-free states; but the parliament of Ukraine, for example, is stipulating a number of conditions for this.

[Correspondent Vladimir Lyaskalo] [Video shows Ukraine Supreme Soviet Chairman Ivan Plushch addressing a news conference] I have no doubt that the Supreme Soviet will ratify the START Treaty. It is not so important whether this happens in December or January. It is just that the deputies will need time to study the bulky package of documents. The important thing is how the conversion of those 176 nuclear-missile complexes now situated on our territory will be carried out.

We are proposing two conditions, Plushch said. The first is that wherever the process takes place, Ukraine must have independent and autonomous control [kontrol]. The second is that the warheads contain not only expensive metal, but also expensive fuel. We need it for our atomic stations and we are now buying it. So we have to know, we have to have an agreement: What proportion of that fuel will be handed over to Ukraine? We'd also like to know what Ukraine can expect after the special nuclear disarmament fund has been set up. What will its share be?

Kazakhs Fear Semipalatinsk N-Test Site Reports

PM3011145592 Moscow KOMSOMOLSKAYA PRAVDA in Russian 28 Nov 92 p 1

[Report by correspondent Ye. Dotsuk: "Nuclear Mushroom Under Tekelen Mountain?"]

[Text] Alma-Ata—Recently the inhabitants of Kazakhstan were frightened by the latest secret of the Semipalatinsk nuclear testing ground: There were reports that several nuclear devices placed in deep shafts before the moratorium on tests was announced have remained unexploded. Official denials followed immediately

But then there appeared one Yu. Vladimirov—he said that he worked at the Semipalatinsk nuclear testing ground from 1987 through 1990 and was in the very group which placed the nuclear devices in the shafts. The main point of Yu. Vladimirov's story was that automatic detonators were installed. That is, he believes that it is not unlikely that they could operate in 1993-1994.

Olzhas Suleymenov, leader of the "Nevada-Semipalatinsk" antinuclear movement, has told the editorial office of a local newspaper that he does not doubt the truth of these facts, also confirmed by a specialist now working in Kurchatov.

I managed to get answers to my questions thanks to the assistance of K. Suleymenov, Kazakhstan's state adviser, and K. Serikbayev, chief of the defense department of the president's apparatus. Major General Safronov, deputy chief of the testing ground, explained the nuclear devices situation. According to Fedor Fedorovich, there really is a nuclear research device [yadernoye fizicheskoye ustroystvo] under the ground of the Semipalatinsk testing ground. It was buried before the introduction of the moratorium and scientists and the military intended to observe the effect of the explosion on various technical devices nearby. The yield of this nuclear

device, General Safronov said, is 0.35 kilotonnes, that is very small. General Safronov also indicated the precise location of the shaft—Tekelen mountain. The device is buried at a depth of 500 meters. Here the height of the mountain itself is 125 meters. It is now truly impossible to render the nuclear device harmless and to remove it from such a depth. It is true that the Russian scientific center is studying various methods of rendering it harmless. One method, the most likely, is to try to make a second, parallel, shaft, in order to remove the device from the other side. That is very expensive, but to all appearances work to remove the nuclear "gift" will nonetheless begin. Most likely not before April 1993.

Armenia Working on Radioactive 'Punishment Weapon'

Armenian Deputy Informs Reporters

NC0212141792 Yerevan SNARK in English 1122 GMT 02 Dec 92

[Text] Yerevan, December 2 (SNARK)—One of the Armenian deputies informed some reporters that Armenia was working on the "punishment weapon". According to him, there will be aircraft bombs filled with radioactive waste of the Armenian atomic station and shells of long-range artillery. Analyzing the fact, the military expert of the SNARK's agency assumes the use of the weapon possible in case Azerbaijan takes attempts to deport the Armenian population of Karabakh or to intrude its troops into the territory of the republic of Nagorno-Karabakh.

Azeri Security Ministry Report

NC0412152592 Baku AZERINFORM in English 1542 GMT 4 Dec 92

[Text] Baku, December 4 (AZERINFORM)—We have every reason to consider Armenia finishing its works on production of a retribution weapon, the Azeri National Security Ministry stated today. According to the data of the ministry Armenia has the retribution weapon—aircraft bombs and artillery missiles stuffed with radioactive wastes of the Armenian nuclear power station. The weapon will be used in the case if the Armenian Expeditionary Corps fails the military operations or in the case of its withdrawal from Karabakh.

The National Security Ministry also has information that there are five remote controlled explosive capsules stuffed with radioactive wastes. But it is impossible to render the capsule harmless because of military operations in upper Karabakh.

Armenian Government Denial

OW0412191692 Moscow INTERFAX in English 1725 GMT 4 Dec 92

[Transmitted via KYODO]

[Text] The assertion that Armenia may soon use "retaliatory weapons," including nuclear weapons, "is the result of annoying misunderstandings or political provocation." The statement was made in an INTERFAX interview with Eduard Simonyants, an advisor to the Armenian president on security issues, regarding mass media reports of "retaliatory weapons."

"Armenia does not plan to manufacture or use nuclear weapons," emphasized Simonyants.

Belarus Plans Nuclear-Free Status by 1995

LD0112144492 Moscow ITAR-TASS in English 1343 GMT 1 Dec 92

[By BELINFORM correspondent Natalya Sverjunova—TASS]

[Text] Minsk December 1 TASS—Belarus hopes to become nuclear-free by the end of 1994, according to the chairman of the Republican Parliamentary Commission on Security and Defence.

Upon agreement with the Russian leadership Belarus plans to transfer 81 intercontinental missiles to Russia by December 30, 1994, Yuriy Popov told the "MIN-SKAYA PRAVDA" newspaper on Tuesday.

He recalled that in order to acquire the nuclear-free status as soon as possible and avert possible nuclear proliferation, Belarus voluntarily undertook an unprecedented step and transferred offensive strategic arms deployed on its territory under the Russian jurisdiction.

Nuclear disarmament is a part of the general military reform in the former Soviet republic which also intends to cut the personnel of its Armed Forces to not more than 100,000 men, Popov said.

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12 January 1993